

STIC Search Report

STIC Database Tracking Number: 197894

TO: Samuel A Acquah Location: REM 10D59

Art Unit : 1711 August 10, 2006

Case Serial Number: 09/613425

From: Usha Shrestha Location: EIC 1700 REMSEN 4B28

Phone: 571/272-3519

usha.shrestha@uspto.gov

Search Notes	
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=> fil reg
FILE 'REGISTRY' ENTERED AT 14:01:53 ON 09 AUG 2006
=> d his ful
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(∵ ...)

L27

L28

37181 SEA ABB=ON L6

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FILE 'HCAPLUS' ENTERED AT 10:47:12 ON 09 AUG 2006
             115 SEA ABB=ON GELMAN R?/AU
 L1
               4 SEA ABB=ON HOWLE M?/AU
 L2
               3 SEA ABB=ON L1 AND L2
 L3
      FILE 'REGISTRY' ENTERED AT 11:09:03 ON 09 AUG 2006
              24 SEA ABB=ON (25037-78-9/BI OR 59680-46-5/BI OR
 L4
                  165245-61-4/BI OR 24937-78-8/BI OR 25085-20-5/BI OR
                 320720-71-6/BI OR 321135-09-5/BI OR 321135-14-2/BI OR
                 83453-06-9/BI OR 97928-80-8/BI OR 106-89-8/BI OR
                 120720-39-0/BI OR 138636-30-3/BI OR 168679-23-0/BI OR
                  220355-99-7/BI OR 225237-11-6/BI OR 25067-01-0/BI OR
                  275356-39-3/BI OR 321134-75-2/BI OR 321139-40-6/BI OR
                  321140-32-3/BI OR 321140-39-0/BI OR 321140-41-4/BI OR
                  94188-92-8/BI)
            42501 SEA ABB=ON PM/PCT
 L5
            55632 SEA ABB=ON PI/PCT
[ L6
                  E POLYAMIDOAMINE-EPIHALOHYDRIN/CN
                  E POLYAMIDOAMINE-EPICHLOROHYDRIN/CN
                  E POLYAMIDOAMINE EPICHLOROHYDRIN/CN
                  E ACRYLAMIDE/CN
                1 SEA ABB=ON ACRYLAMIDE/CN
 L7
                1 SEA ABB=ON STYRENE/CN
 L8
                  E DIMETHYLSTYRENE/CN
                1 SEA ABB=ON DIMETHYLSTYRENE/CN
  L9
                  E VINYLTOLUENE/CN
                1 SEA ABB=ON VINYLTOLUENE/CN
  L10
                  E CHLOROPRENE/CN
                1 SEA ABB=ON CHLOROPRENE/CN
  L11
                  E BUTADIENE/CN
                2 SEA ABB=ON BUTADIENE/CN
  L12
                1 SEA ABB=ON ETHYLENE/CN
  L13
                1 SEA ABB=ON ACRYLONITRILE/CN
1 SEA ABB=ON ACROLEIN/CN
  L14
  L15
                1 SEA ABB=ON METHYL ACRYLATE/CN
  L16
                1 SEA ABB=ON ETHYL ACRYLATE/CN
  L17
                1 SEA ABB=ON ACRYLIC ACID/CN
  L18
                1 SEA ABB=ON METHACRYLIC ACID/CN
  L19
                1 SEA ABB=ON METHYL METHACRYLATE/CN
  L20
                1 SEA ABB=ON BUTYL ACRYLATE/CN
  L21
                1 SEA ABB=ON VINYLIDENE CHLORIDE/CN
  L22
                1 SEA ABB=ON VINYL CHLORIDE/CN
  L23
                1 SEA ABB=ON VINYL ACETATE/CN
  L24
                   E HYDROXYETHYL ACRYLATE/CN
                1 SEA ABB=ON ("HYDROXYETHYL ACRYLATE HOMOPOLYMER"/CN OR
  L25
                   "HYDROXYETHYL ACRYLATE POLYMER"/CN)
                O SEA ABB=ON DIMETHYLAMINOETHYLENE ACRYLATE/CN
  L26
                   E DIMETHYLAMINOETHYLENE ACRYLATE/CN
                   E DIMETHYLAMINO ETHYLENE ACRYLATE/CN
                   E DIMETHYLAMINO ETHYLENEACRYLATE/CN
                   E AZETIDINIUM/CN
       FILE 'HCAPLUS' ENTERED AT 13:12:50 ON 09 AUG 2006
                              L5
             56928 SEA ABB=ON
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287515 SEA ABB=ON L8 OR STYRENE
L29
                        QUE ABB=ON L9 OR DIMETHYLSTYRENE?
L30
                        QUE ABB=ON L10 OR VINYLTOLUENE?
L31
                8692 SEA ABB=ON L11 OR CHLOROPRENE?
L32
             159330 SEA ABB=ON L12 OR BUTADIENE?
L33
                        QUE ABB=ON L13 OR ETHYLENE
L34
                        QUE ABB=ON L14 OR ACRYLONITRILE
L35
                        QUE ABB=ON L15 OR ACROLEIN
QUE ABB=ON L16 OR METHYL(A) ACRYLATE OR METHYLACRYLATE
L36
L37
                        QUE ABB=ON L17 OR ETHYL(A) ACRYLATE OR ETHYLACRYLATE
T.38
                        QUE ABB=ON L18 OR ACRYLIC(A) ACID OR ACRYLICACID
QUE ABB=ON L19 OR METHACRYLIC(A) ACID OR METHACRYLICACI
L39
L40
                        D
                        QUE ABB=ON L20 OR METHYL(W)METHACRYLATE OR METHYLMET
L41
                        HACRYLATE
                        QUE ABB=ON L21 OR BUTYL(A) ACRYLATE? OR BUTYLACRYLATE
L42
                        QUE ABB=ON L22 OR VINYLIDENE (A) CHLORIDE OR VINYLIDEN
L43
                        ECHLORIDE
                        OUE ABB=ON L23 OR VINYL(A) CHLORIDE OR VINYLCHLORIDE
1.44
                        QUE ABB=ON L24 OR VINYL(A) ACETATE OR VINYLACETATE
L45
                        QUE ABB=ON L25 OR HYDROXYETHYL (A) ACRYLATE OR HYDROXYET
L46
                        HYLACRYLATE
                         QUE ABB=ON (L29 OR L30 OR L31 OR L32 OR L33 OR L34 OR
1.47
                         L35 OR L36 OR L37 OR L38 OR L39 OR L40 OR L41 OR L42
                         OR L43 OR L44 OR L45 OR L46)
               91030 SEA ABB=ON L27 OR L28
31361 SEA ABB=ON L48 AND (EPOXY? OR AZETIDINIUM? OR
L48
L49
                         ?ALDEHYD? OR ?CARBOXYL? OR ACRYLAT? OR ACRYLAMID? OR
                         OUATERNARY (A) AMIN? OR QUATERNARYAMIN?)
                 7816 SEA ABB=ON L49 AND L47
1546 SEA ABB=ON L48 AND FILM? (A) FORM?
610 SEA ABB=ON L51 AND L49
30 SEA ABB=ON L52 AND (SIZING(A) MATERIAL? OR KETEN(A) DIME
L50
L51
L52
L53
                         R? OR ?SUCCINIC(A) ANHYDRID? OR FATTY(A) ACID? OR WAX?)
                 R? OR ?SUCCINIC (A) ANHYDRID? OR FATTY (A) ACID? OR WAX?

237 SEA ABB=ON L52 AND COMPOSITION?

68 SEA ABB=ON L54 AND POF/RL

0 SEA ABB=ON L55 AND (WEIGHT OR WT?) (A) RATIO?

2 SEA ABB=ON L51 AND L3

125 SEA ABB=ON L49 AND AQUE? (A) COMPOSITION?

14 SEA ABB=ON L58 AND FILM? (A) FORM?

21 SEA ABB=ON L51 AND AQUE? (A) COMPOSITION?

21 SEA ABB=ON L59 OR L60

0 SEA ABB=ON L61 AND (WEIGHT OR WT? OR WT) (3A) RATIO?

21 SEA ABB=ON L56 OR L61 OR L62

43 SEA ABB=ON POLYAMIDOAMINE (A) EPIHALOHYDRIN? OR

POLYAMIDOAMINE (A) EPICHLOROHYDRIN? OR POLYAMIDOAMINE
L54
L55
L56
L57
L58
L59
L60
L61
 L62
 L63
 L64
                         POLYAMIDOAMINE (A) EPICHLOROHYDRIN? OR POLYAMIDOAMINE (A) E
                         PIBROMOHYDRIN?
                    16 SEA ABB=ON L64 AND (EPOXY? OR AZETIDINIUM? OR
 L65
                         ?ALDEHYD? OR ?CARBOXYL? OR ACRYLAT? OR ACRYLAMID? OR
                         OUATERNARY (A) AMIN? OR QUATERNARYAMIN?)
                 8 SEA ABB=UN L65 AND L47

7818 SEA ABB=ON L66 OR L50

345 SEA ABB=ON L67 AND FILM? (2A) FORM?

20 SEA ABB=ON L68 AND AQUE? (A) COMPOSITION?

32 SEA ABB=ON L63 OR L69

22 SEA ABB=ON L70 AND (1840-2000)/PRY,AY,PY

1 SEA ABB=ON L71 AND L3
                      8 SEA ABB=ON L65 AND L47
 L66
 L67
 L68
 L69
 L70
 L71
 L72
                 2797 SEA ABB=ON L67 AND (SIZING OR COAT?)
 L73
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59 SEA ABB=ON L73 AND AQUE? (A) COMPOSITION?
L74
                  1 SEA ABB=ON L74 AND (WEIGHT OR WT? OR WT) (3A) RATIO?
                1 SEA ABB=ON L/4 AND (WEIGHT OR WT? OR WT) (3A) RATIO?
39 SEA ABB=ON L/3 AND (WEIGHT OR WT? OR WT) (3A) RATIO?
0 SEA ABB=ON L/6 AND FILM? (2A) FORM
20 SEA ABB=ON L/6 AND COMPOSITION?
15 SEA ABB=ON L/8 AND (1840-2000)/PRY, AY, PY
37 SEA ABB=ON L/1 OR L/19
L75
L76
L77
L78
L79
L80
=> d que 180
              42501 SEA FILE=REGISTRY ABB=ON PM/PCT
              55632 SEA FILE=REGISTRY ABB=ON PI/PCT
                    1 SEA FILE=REGISTRY ABB=ON STYRENE/CN
L8
                    1 SEA FILE=REGISTRY ABB=ON DIMETHYLSTYRENE/CN
L9
                    1 SEA FILE=REGISTRY ABB=ON VINYLTOLUENE/CN
L10
                   1 SEA FILE=REGISTRY ABB=ON CHLOROPRENE/CN
L11
                  2 SEA FILE=REGISTRY ABB=ON BUTADIENE/CN
L12
                  1 SEA FILE=REGISTRY ABB=ON ETHYLENE/CN
L13
                  1 SEA FILE=REGISTRY ABB=ON ACRYLONITRILE/CN
               1 SEA FILE=REGISTRY ABB=ON ACRYLONITRILE/CN
1 SEA FILE=REGISTRY ABB=ON ACROLEIN/CN
1 SEA FILE=REGISTRY ABB=ON METHYL ACRYLATE/CN
1 SEA FILE=REGISTRY ABB=ON ACRYLIC ACID/CN
1 SEA FILE=REGISTRY ABB=ON METHACRYLIC ACID/CN
1 SEA FILE=REGISTRY ABB=ON METHYL METHACRYLATE/CN
1 SEA FILE=REGISTRY ABB=ON BUTYL ACRYLATE/CN
1 SEA FILE=REGISTRY ABB=ON VINYLIDENE CHLORIDE/CN
L14
L15
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L21
                  1 SEA FILE=REGISTRY ABB=ON VINYLIDENE CHLORIDE/CN
L22
                   1 SEA FILE=REGISTRY ABB=ON VINYL CHLORIDE/CN
L23
                   1 SEA FILE=REGISTRY ABB=ON VINYL ACETATE/CN
L24
                    1 SEA FILE=REGISTRY ABB=ON ("HYDROXYETHYL ACRYLATE
L25
                        HOMOPOLYMER"/CN OR "HYDROXYETHYL ACRYLATE POLYMER"/CN)
              56928 SEA FILE=HCAPLUS ABB=ON L5
L27
              37181 SEA FILE=HCAPLUS ABB=ON L6
L28
             287515 SEA FILE=HCAPLUS ABB=ON L8 OR STYRENE
 L29
                        QUE ABB=ON L9 OR DIMETHYLSTYRENE?
QUE ABB=ON L10 OR VINYLTOLUENE?
 L30
 L31
                8692 SEA FILE=HCAPLUS ABB=ON L11 OR CHLOROPRENE?
 L32
              159330 SEA FILE=HCAPLUS ABB=ON L12 OR BUTADIENE?
                       QUE ABB=ON L13 OR ETHYLENE
QUE ABB=ON L14 OR ACRYLONITRILE
QUE ABB=ON L15 OR ACROLEIN
QUE ABB=ON L16 OR METHYL(A)ACRYLATE OR METHYLACRYLATE
QUE ABB=ON L17 OR ETHYL(A)ACRYLATE OR ETHYLACRYLATE
QUE ABB=ON L18 OR ACRYLIC(A)ACID OR ACRYLICACID
QUE ABB=ON L19 OR METHACRYLIC(A)ACID OR METHACRYLICAC
 L33
 L34
 L35
 L36
 L37
 L38
 L39
 L40
                        ID
                        OUE ABB=ON L20 OR METHYL(W)METHACRYLATE OR METHYLME
 L41
                        THACRYLATE
                        QUE ABB=ON L21 OR BUTYL(A) ACRYLATE? OR BUTYLACRYLATE
 L42
                        OUE ABB=ON L22 OR VINYLIDENE(A) CHLORIDE OR VINYLIDE
 L43
                        NECHLORIDE
                        QUE ABB=ON L23 OR VINYL(A) CHLORIDE OR VINYLCHLORIDE
 L44
                        QUE ABB=ON L24 OR VINYL(A)ACETATE OR VINYLACETATE
QUE ABB=ON L25 OR HYDROXYETHYL(A)ACRYLATE OR HYDROXYE
 L45
 L46
                        THYLACRYLATE
                        QUE ABB=ON (L29 OR L30 OR L31 OR L32 OR L33 OR L34 OR
 L47
                          L35 OR L36 OR L37 OR L38 OR L39 OR L40 OR L41 OR L42 O
                        R L43 OR L44 OR L45 OR L46)
                91030 SEA FILE=HCAPLUS ABB=ON L27 OR L28
 L48
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31361 SEA FILE=HCAPLUS ABB=ON L48 AND (EPOXY? OR AZETIDINIUM
L49
                ? OR ?ALDEHYD? OR ?CARBOXYL? OR ACRYLAT? OR ACRYLAMID?
                OR QUATERNARY (A) AMIN? OR QUATERNARYAMIN?)
           7816 SEA FILE=HCAPLUS ABB=ON L49 AND L47
L50
           1546 SEA FILE=HCAPLUS ABB=ON L48 AND FILM? (A) FORM?
L51
            610 SEA FILE=HCAPLUS ABB=ON L51 AND L49
L52
            237 SEA FILE=HCAPLUS ABB=ON L52 AND COMPOSITION?
L54
             68 SEA FILE=HCAPLUS ABB=ON L54 AND POF/RL
L55
              O SEA FILE=HCAPLUS ABB=ON L55 AND (WEIGHT OR WT?) (A) RATI
L56
                02
            125 SEA FILE=HCAPLUS ABB=ON L49 AND AQUE? (A) COMPOSITION?
L58
            14 SEA FILE=HCAPLUS ABB=ON L58 AND FILM? (A) FORM?
L59
             21 SEA FILE=HCAPLUS ABB=ON L51 AND AQUE? (A) COMPOSITION?
L60
             21 SEA FILE=HCAPLUS ABB=ON L59 OR L60
L61
              O SEA FILE=HCAPLUS ABB=ON L61 AND (WEIGHT OR WT? OR
L62
                WT) (3A) RATIO?
             21 SEA FILE=HCAPLUS ABB=ON L56 OR L61 OR L62
L63
             43 SEA FILE=HCAPLUS ABB=ON POLYAMIDOAMINE(A)EPIHALOHYDRIN
L64
                ? OR POLYAMIDOAMINE(A)EPICHLOROHYDRIN? OR POLYAMIDOAMIN
                E(A) EPIBROMOHYDRIN?
             16 SEA FILE=HCAPLUS ABB=ON L64 AND (EPOXY? OR AZETIDINIUM
L65
                ? OR ?ALDEHYD? OR ?CARBOXYL? OR ACRYLAT? OR ACRYLAMID?
                OR QUATERNARY(A)AMIN? OR QUATERNARYAMIN?)
              8 SEA FILE=HCAPLUS ABB=ON L65 AND L47
L66
           7818 SEA FILE=HCAPLUS ABB=ON L66 OR L50
L67
            345 SEA FILE=HCAPLUS ABB=ON L67 AND FILM? (2A) FORM?
L68
             20 SEA FILE=HCAPLUS ABB=ON L68 AND AQUE? (A) COMPOSITION?
L69
             32 SEA FILE=HCAPLUS ABB=ON L63 OR L69
L70
             22 SEA FILE=HCAPLUS ABB=ON L70 AND (1840-2000)/PRY,AY,PY
L71
           2797 SEA FILE=HCAPLUS ABB=ON L67 AND (SIZING OR COAT?)
L73
             39 SEA FILE=HCAPLUS ABB=ON L73 AND (WEIGHT OR WT? OR
L76
                WT) (3A) RATIO?
                                        L76 AND COMPOSITION?
             20 SEA FILE=HCAPLUS ABB=ON
L78
                                        L78 AND (1840-2000)/PRY,AY,PY
             15 SEA FILE=HCAPLUS ABB=ON
L79
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=> fil hcap FILE 'HCAPLUS' ENTERED AT 14:02:09 ON 09 AUG 2006

=> d 180 1-37 ibib abs hitstr hitind

L80 ANSWER 1 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

2003:507695 HCAPLUS ACCESSION NUMBER:

139:69984 DOCUMENT NUMBER:

L80

INVENTOR(S):

Polyamidoamine-epihalohydrin resin TITLE:

37 SEA FILE=HCAPLUS ABB=ON L71 OR L79

compositions containing latex polymers for imparting desired properties to materials Canorro, James; Gelman, Robert A.; Howle, Matthew B.; Keys, Andrea; Lefever, Joanne;

Maslanka, William W.; Melzer, Jeffrey I.; Mottern, Kevin M.; Raab, Michael T.;

Rodriquez, William; Stuhrke, Richard A.; Steed, Jennifer E.; Szewczyk, Robert G.

Hercules Incorporated, USA PATENT ASSIGNEE(S):

U.S., 22 pp., Cont.-in-part of U.S. Ser. No. SOURCE:

348,346.

CODEN: USXXAM

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6586520	B1	20030701	US 2000-613529	
				2000
				0710
		00060501	< ES 2000-945265	
ES 2251384	Т3	20060501	ES 2000-945265	2000
				0710
			<	0.10
บร 2003199629	A1	20031023	US 2003-341164	
05 2003199829	A.	20031020		2003
				0113
			<	
US 2004020565	A1	20040205	US 2003-631523	
				2003
				0731
			<	
PRIORITY APPLN. INFO.:			US 1999-348346	B2
				1999 0708
			_	0708
			< US 2000-613529	A3
			05 2000 013325	2000
				0710
			<	
			US 2003-341164	B2
				2003
				0113
			US 2003-430579	B2
				2003
				0506

AB An aqueous composition comprises: (A) at least one water-soluble polyamidoamine-epihalohydrin polymer having at least one functional group capable of undergoing crosslinking with another component A polymer upon heating or drying of the composition, and (B) at least one water-insol. film forming latex polymer, wherein the ratio of A to B is from about 5:1 to 1:1 based on dry weight of A and B. The compns. have good adhesion to substrates. A composition contained KYMENE 557H and Res 3077.

IT 25085-20-5D, Adipic acid-diethylenetriamine copolymer, reaction products with epichlorohydrin

(polyamidoamine-epihalohydrin resin compns. containing latex polymers for imparting desired properties to materials)

RN 25085-20-5 HCAPLUS

CN Hexanedioic acid, polymer with N-(2-aminoethyl)-1,2-ethanediamine (9CI) (CA INDEX NAME)

CM 1

CRN 124-04-9 CMF C6 H10 O4

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_{\rm HO_2C^-} (CH<sub>2</sub>)<sub>4</sub>-CO<sub>2</sub>H
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CRN 111-40-0 CMF C4 H13 N3

 $H_2N-CH_2-CH_2-NH-CH_2-CH_2-NH_2$

IC ICM C08L077-06

ICS C08L031-04; C08L033-00

INCL 524514000; 524502000; 524503000; 524517000; 524519000; 524521000; 524522000; 524523000; 524524000; 524527000

CC 37-6 (Plastics Manufacture and Processing)

Section cross-reference(s): 42

1T 106-89-8D, Epichlorohydrin, reaction products with adipic acid-diethylenetriamine copolymer 24937-78-8, Airflex 500

25037-78-9, Airflex 4514 **25085-20-5D**, Adipic acid-diethylenetriamine copolymer, reaction products with

epichlorohydrin 59680-46-5, KYMENE 557H 83453-06-9, Dow 620

97928-80-8, Airflex 4500 165245-61-4, Flexthane 620

320720-71-6, HERCOBOND 5100 321135-09-5, Res 3077 321135-14-2,

Vinac 884

(polyamidoamine-epihalohydrin resin compns. containing latex polymers for imparting desired properties to materials)

REFERENCE COUNT: 32 THERE

THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE

IN THE RE FORMAT

L80 ANSWER 2 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2002:341421 HCAPLUS

DOCUMENT NUMBER:

INVENTOR(S):

136:356448

TITLE:

Aqueous middle coating compositions, multilayered coating films therefrom

and formation method therewith

Ohara, Koichi; Yamamoto, Takeshi

PATENT ASSIGNEE(S):

Nippon Paint Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

Japanese

1

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002126637	A2	20020508	JP 2000-326511	2000 1026
PRIORITY APPLN. INFO.:			< JP 2000-326511	2000 1026

<--

Title compns., with good adhesion to topcoats, contain polyesters AB having acid value (A1) of 20-100 mg-KOH/g and polyesters having A1 of <20 mg-KOH/g. An U 50-deposited and phosphated steel plate was sprayed with an aqueous composition containing a dispersant (Epo Tohto YDCN 703-Farmin D 86-SHP 100 reaction product), TiO2, U-Van 20N60, 2,2'-dimethylolbutanoic acid-isophthalic acid (I)-phthalic anhydride (II)-neopentyl glycol (III)trimethylolpropane (IV)-Cardura E 10 copolymer (with A1 of 8 mg-KOH/g), and I-II-III-IV-hexahydrophthalic acid copolymer (with Al of 50 mg-KOH/g), baked at 140° for 30 min, sprayed with an aqueous base containing Cymel 204 and Et acrylate -2-hydroxyethyl acrylate-methacrylic acid-Me methacrylate-styrene copolymer dimethylethanolamine salt, dried at 80° for 5 min, covered with Mac Flow O 1801W clear , and baked to form a plate showing adhesion (between the middle and top coats) of 2 times than that of a plate prepared similarly using a middle coat containing only the polyester with A1 of 8 mg-KOH/g. 420848-97-1P, Bisphenol A-epichlorohydrin-IPDI-IT

1T 420848-97-1P, Bisphenol A-epichlorohydrin-1PD1diethylenetriamine-N-methylethanoalmine-TDI copolymer
(electrodeposits; high and low acid value polyester blend-based
aqueous middle coats with good adhesion to topcoats)
RN 420848-97-1 HCAPLUS

420848-97-1 HCAPLUS
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with
N-(2-aminoethyl)-1,2-ethanediamine, (chloromethyl)oxirane,
1,3-diisocyanatomethylbenzene, 5-isocyanato-1-(isocyanatomethyl)1,3,3-trimethylcyclohexane and 2-(methylamino)ethanol (9CI) (CA
INDEX NAME)

CM 1

CN

CRN 26471-62-5 CMF C9 H6 N2 O2 CCI IDS

D1-Me

CM 2

CRN 4098-71-9 CMF C12 H18 N2 O2

CRN 111-40-0 CMF C4 H13 N3

 $_{\rm H_2N-CH_2-CH_2-NH-CH_2-CH_2-NH_2}$

CM 4

CRN 109-83-1 CMF C3 H9 N O

 $_{\mathrm{HO}-\,\mathrm{CH}_2-\,\mathrm{CH}_2-\,\mathrm{NH}-\,\mathrm{CH}_3}$

CM 5

CRN 106-89-8 CMF C3 H5 Cl O

CM 6

CRN 80-05-7 CMF C15 H16 O2

IC

ICM B05D007-14
ICS B05D001-36; B05D007-24; C09D005-02; C09D167-00; C25D013-00

42-8 (Coatings, Inks, and Related Products) CC

Amines, reactions ΙT

(di-C16-18-alkyl, Farmin D 86, reaction products with
epoxy resins and mercaptodiols, as dispersant; high and
low acid value polyester blend-based aqueous middle coats with good
adhesion to topcoats)

IT Epoxy resins, uses

(dispersants; high and low acid value polyester blend-based aqueous middle coats with good adhesion to topcoats)

IT 161487-11-2P, Ethyl acrylate-2-

hydroxyethyl acrylate-methacrylic

acid-methyl methacrylate-

styrene copolymer dimethylethanolamine salt

(aqueous base coat; high and low acid value polyester blend-based aqueous middle coats with good adhesion to topcoats)

IT 420848-96-0P, 2,2-Dimethylolbutanoic acid-hexahydrophthalic acid-isophthalic acid-phthalic anhydride-neopentyl glycol-trimethylolpropane-melamine-formaldehyde-Cardura E 10 copolymer

(crosslinked; high and low acid value polyester blend-based aqueous middle coats with good adhesion to topcoats)

111-42-2DP, Diethanolamine, reaction products with dialkylamines and cresol novolak epoxy resins and mercaptodiols 6713-03-7DP, SHP 100, reaction products with dialkylamines and cresol novolak epoxy resins and diethanolamine 101706-82-5DP, Epo Tohto YDCN 703, reaction products with dialkylamines and mercaptodiols and diethanolamine

(dispersant; high and low acid value polyester blend-based aqueous middle coats with good adhesion to topcoats)

IT 420848-97-1P, Bisphenol A-epichlorohydrin-IPDI-

diethylenetriamine-N-methylethanoalmine-TDI copolymer

(electrodeposits; high and low acid value polyester blend-based aqueous middle coats with good adhesion to topcoats)

L80 ANSWER 3 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:293775 HCAPLUS

DOCUMENT NUMBER: 136:326996

TITLE: Method for pretreating and subsequently

coating metallic surfaces with a paint-type coating prior to forming and use of substrates

<--

coated in this way

INVENTOR(S): Shimakura, Toshiaki; Bittner, Klaus; Domes,

Heribert; Wietzoreck, Hardy; Jung, Christian

PATENT ASSIGNEE(S): Chemteall Gmbh, Germany SOURCE: PCT Int. Appl., 115 pp.

CODEN: PIXXD2
Patent

DOCUMENT TYPE:

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 6

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002031065	A2	20020418	WO 2001-EP11738	2001 1010

WO 2002031065 A3 20020627

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,

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KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK,
             MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG,
             SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU,
             ZA, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE,
             CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
             MR, NE, SN, TD, TG
                                             AU 2002-15940
                                 20020422
    AU 2002015940
                          A5
                                                                      2001
                                                                      1010
                                                 <--
                                              CA 2001-2425403
                                 20030408
                          AΑ
     CA 2425403
                                                                       2001
                                                                       1010
                                                 <--
                                 20030730
                                              EP 2001-986707
                          A2
     EP 1330499
                                                                       2001
                                                                       1010
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                          A2 20060405 EP 2005-17734
     EP 1642939
                                                                       2001
                                                                       1010
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
             MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                         A1 20040115 US 2003-362388
     US 2004009300
                                                                       2003
                                                                       0701
                                              DE 2000-10050532
PRIORITY APPLN. INFO.:
                                                                       2000
                                                                       1011
                                                  <--
                                              DE 2001-10110830
                                                                       2001
                                                                       0306
                                              DE 2001-10119606
                                                                       2001
                                                                       0421
                                              DE 2000-10050537
                                                                       2000
                                                                       1011
                                              DE 2001-10127721
                                                                       2001
                                                                       0607
                                              EP 2001-976296
                                                                    A3
                                                                       2001
                                                                       1010
                                              WO 2001-EP11738
                                                                       2001
                                                                       1010
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The invention relates to a method for coating a metallic strip. AB The strip or optionally, the strip sections produced from said strip in the subsequent process, is/are coated first with at least one anticorrosion layer and then with at least one layer of a paint-like coating containing polymers and/or with at least one paint coating. After being coated with at least one anticorrosion layer or after being coated with at least one layer of a paint-like coating and/or with at least one paint coating, the strip is divided into strip sections. The coated strip sections are then formed, joined and/or coated with at least one (other) paint-like coating and/or paint coating. At least one of the anticorrosion layers is formed by coating the surface with an aqueous dispersion containing the following in addition to water: (a) at least one organic film former containing at least one water-soluble or water-dispersed polymer; (b) a quantity of cations and/or hexa- or tetrafluoro complexes of cations chosen from a group consisting of titanium, zirconium, hafnium, silicon, aluminum and boron; and (c) at least one inorg. compound in particle form with an average particle diameter measured on a scanning electron microscope of 0.005 to 0.2 The clean metallic surface is brought into contact with the aqueous composition and a film containing particles is formed on the metallic surface, this film then being dried and optionally also hardened, the dried and optionally, also hardened film having a layer thickness of 0.01 to 10 μm . The speed of coating metal objects with complex profiles is high using this process and need of Cr6+ compds. and acids is reduced. The coated products are useful in manufacture of automobile bodies, aircraft, and spacecraft. 9002-98-6, Polyethylenimine 25608-40-6, ΙT Polyaspartic acid (anticorrosive primer component; pretreating with anticorrosive primers and subsequently coating metallic surfaces with a paint-type coating prior to forming) 9002-98-6 HCAPLUS RΝ Aziridine, homopolymer (9CI) (CA INDEX NAME) CNCM CRN 151-56-4 CMF C2 H5 N



25608-40-6 HCAPLUS RN L-Aspartic acid, homopolymer (9CI) (CA INDEX NAME) CM CRN 56-84-8 CMF C4 H7 N O4

Absolute stereochemistry. Rotation (+).

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HO<sub>2</sub>C
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ICM C09D005-00 IC

42-2 (Coatings, Inks, and Related Products) CC

Section cross-reference(s): 55, 56

9002-89-5, Polyvinyl 79-10-7D, Acrylic acid, esters, polymers IT alcohol 9002-98-6, Polyethylenimine 9003-39-8, Polyvinylpyrrolidone 9003-53-6, Polystyrene 9011-05-6, Urea 26063-13-8,

resin 25608-40-6, Polyaspartic acid 59269-51-1, Polyvinylphenol Polyaspartic acid

(anticorrosive primer component; pretreating with anticorrosive primers and subsequently coating metallic surfaces with a paint-type coating prior to forming)

L80 ANSWER 4 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2002:293774 HCAPLUS 136:326995

DOCUMENT NUMBER: TITLE:

Method for pretreating and/or coating metallic surfaces with a paint-like coating prior to

forming and use of substrates coated in this

way

INVENTOR (S):

Jung, Christian; Schimakura, Toshiaki; Maurus,

Norbert; Domes, Heribert Chemteall Gmbh, Germany

PATENT ASSIGNEE(S):

SOURCE:

PCT Int. Appl., 146 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
			•
WO 2002031064	A1 20020418	WO 2001-EP11737	2001 1010
CH, CN, CR, GE, GH, GM, KZ, LC, LK, MX, MZ, NO, TJ, TM, TR, RW: GH, GM, KE, CH, CY, DE,	CU, CZ, DE, DK, HR, HU, ID, IL, LR, LS, LT, LU, NZ, PL, PT, RO, TT, TZ, UA, UG, LS, MW, MZ, SD, DK, ES, FI, FR, BF, BJ, CF, CG,	BA, BB, BG, BR, BY, BZ, DM, DZ, EE, ES, FI, GB, IN, IS, JP, KE, KG, KP, LV, MA, MD, MG, MK, MN, RU, SD, SE, SG, SI, SK, US, UZ, VN, YU, ZA, ZW SL, SZ, TZ, UG, ZW, AT, GB, GR, IE, IT, LU, MC, CI, CM, GA, GN, GQ, GW	GD, KR, MW, SL, BE,
	AA 20020418	CA 2001-2426081	2001
AU 2001095609	A5 20020422	< AU 2001-95609	2001 1010

1010

<--20030723 EP 2001-976296 **A1** EP 1328590 2001 1010 <--R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR 20040413 ZA 2003-2864 ZA 2003002864 Α 2001 1010 <--EP 2005-17734 A2 20060405 EP 1642939 2001 1010 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR ZA 2003-2862 Α 20040413 ZA 2003002862 2003 0411 <--US 2004062873 US 2003-362403 A1 20040401 2003 0909 DE 2000-10050537 PRIORITY APPLN. INFO.: 2000 1011 DE 2001-10110830 2001 0306 DE 2001-10119606 2001 0421 DE 2001-10127721 2001 0607 **A3** EP 2001-976296 2001 1010 WO 2001-EP11737 2001

The invention relates to a method for coating a metallic strip. The strip or optionally, the strip sections produced from said strip in the subsequent process, is/are first coated with at least one anticorrosion layer - according to an alternative form of embodiment, this can be left out - and then with at least one layer of a paint-like coating containing polymers. After being coated with at least one anticorrosion layer or after being coated with at least one layer of a paint-like coating, the strip is divided into strip sections. The coated strip sections are then formed, joined and/or coated with at least one (other) paint-like coating and/or paint coating. The paint-like coating is formed by coating

the surface with an aqueous dispersion containing the following in addition to water: (a) at least one organic film former containing at least one water-soluble or water-dispersed polymer with an acid value of 5 to 200; (b) at least one inorg. compound in particle form with an average particle diameter measured on a scanning electron microscope of 0.005 to 0.3 μm ; and (c) at least one lubricant and/or at least one corrosion inhibitor. The metallic surface that is optionally coated with at least one anticorrosion layer is brought into contact with the aqueous composition and a film containing particles is formed on the metallic surface, this film then being dried and optionally also hardened, the dried and optionally, also hardened film having a layer thickness of 0.01 to 10 μm . The speed of coating metal objects with complex profiles is high using this process and need of Cr6+ compds. and acids is reduced. The coated products are useful in manufacture of automobile bodies, aircraft, and spacecraft. 79-10-7D, Acrylic acid, esters,

IT 79-10-7D, Acrylic acid, esters,
polymers with epoxy group-containing compds.

25608-40-6, Polyaspartic acid (pretreating and/or coating metallic surfaces with a paint-like coating prior to forming for prevention of corrosion of formed coated product)

RN 79-10-7 HCAPLUS

CN 2-Propenoic acid (9CI) (CA INDEX NAME)

RN 25608-40-6 HCAPLUS CN L-Aspartic acid, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 56-84-8 CMF C4 H7 N O4

Absolute stereochemistry. Rotation (+).

IC ICM C09D005-00 ICS C09D005-08

CC 42-2 (Coatings, Inks, and Related Products) Section cross-reference(s): 55, 56

TT 598-62-9, Manganese carbonate 674-70-4 674-71-5 765 919-30-2, 3-Aminopropyltriethoxysilane 1429-50-1, Ethylenediaminetetramethylenephosphonic acid 3071-50-9 4546-06-9, p-Xylylenediphosphonic acid 4671-77-6,

1,4-Butanediphosphonic acid 4721-22-6, 1,6-Hexanediphosphonic acid 5943-21-5, 1,10-Decanediphosphonic acid 5943-66-8, 1,8-Octanediphosphonic acid 6419-19-8,

Aminotrimethylenephosphonic acid 7429-90-5D, Aluminum, compds. 7439-89-6D, Iron, compds. 7439-95-4D, Magnesium, compds.

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7439-96-5D, Manganese, compds. 7439-98-7D, Molybdenum, compds.
    7440-02-0D, Nickel, compds. 7440-32-6D, Titanium, compds. 7440-33-7D, Tungsten, compds. 7440-47-3D, Chromium, compds.
    7440-48-4D, Cobalt, compds. 7440-58-6D, Hafnium, compds.
    7440-67-7D, Zirconium, compds. 7450-59-1, 1,12-
    Dodecanediphosphonic acid 11101-13-6 12021-95-3 12781-95-2
    15827-60-8, Diethylenetriaminepentamethylenephosphonic acid
    16068-37-4, 1,2-Bis(triethoxysilyl)ethane 21645-51-2, Aluminum
                     23605-74-5 37971-36-1, 2-Phosphonobutane-1,2,4-
    hydroxide, uses
       tricarboxylic acid 50421-68-6 74748-16-6
               151861-26-6 159239-33-5, 12-
    85590-01-8
    Mercaptododecylphosphonic acid 198065-35-9, 12-
     (Ethylamino) dodecanephosphonic acid 210237-15-3
                                                        216106-45-5
                  412916-50-8 412916-52-0 412916-54-2
    378232-64-5
        (anticorrosive primer; pretreating and/or coating metallic
        surfaces with a paint-like coating prior to forming for
       prevention of corrosion of formed coated product)
    79-10-7D, Acrylic acid, esters,
IT
    polymers with epoxy group-containing compds.
                                                   9002-89-5,
     Polyvinyl alcohol 9003-39-8, Polyvinylpyrrolidone 9010-77-9,
     Ethylene-acrylic acid copolymer
     9011-05-6, Urea resin 25608-40-6, Polyaspartic acid
     26063-13-8, Polyaspartic acid 59269-51-1, Polyvinylphenol
        (pretreating and/or coating metallic surfaces with a paint-like
        coating prior to forming for prevention of corrosion of formed
        coated product)
     9003-55-8D, Butadiene-styrene copolymer,
IT
     carboxy derivs.
        (pretreating and/or coating metallic surfaces with a paint-like
        coating prior to forming for prevention of corrosion of formed
        coated product)
                               THERE ARE 4 CITED REFERENCES AVAILABLE
                         4
REFERENCE COUNT:
                               FOR THIS RECORD. ALL CITATIONS AVAILABLE
                               IN THE RE FORMAT
L80 ANSWER 5 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN
                        2002:31574 HCAPLUS
ACCESSION NUMBER:
                         136:86684
DOCUMENT NUMBER:
                         Aqueous resin composition, ink-jet recording
TITLE:
                         material, and ink-jet recording method
                         Tanaka, Yoshimasa; Inoue, Masato; Matsuo,
INVENTOR (S):
                         Masatoshi; Hashimoto, Yutaka
                         Dainippon Ink and Chemicals, Inc., Japan
PATENT ASSIGNEE(S):
                         PCT Int. Appl., 29 pp.
SOURCE:
                         CODEN: PIXXD2
                         Patent
DOCUMENT TYPE:
                         Japanese
LANGUAGE:
FAMILY ACC. NUM. COUNT:
                         1
PATENT INFORMATION:
                     KIND
                                                                   DATE
                                           APPLICATION NO.
                                DATE
     PATENT NO.
                                            ______
                        ----
     _____
                                20020110 WO 2001-JP5552
     WO 2002002695 A1
                                                                   2001
                                                                   0628
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W: US
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU,
MC, NL, PT, SE, TR

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JP 2000-198514
                         A2
                               20020115
    JP 2002011942
                                                                   2000
                                                                   0630
                                               <--
                               20030402
                                           EP 2001-945659
                         A1
    EP 1298173
                                                                   2001
                                                                   0628
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
            MC, PT, IE, FI, CY, TR
                                           JP 2001-391503
    JP 2002317116
                               20021031
                         A2
                                                                   2001
                                                                   1225
                                           US 2002-311304
    US 2003103129
                               20030605
                        A1
                                                                   2002
                                                                   1227
                                               <--
                                            JP 2000-198514
PRIORITY APPLN. INFO.:
                                                                   2000
                                                                   0630
                                               <--
                                            JP 2001-40027
                                                                   2001
                                                                   0216
                                            WO 2001-JP5552
                                                                   2001
                                                                   0628
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An aqueous resin composition comprises a water-soluble magnesium salt (A) and an aqueous polyurethane (B). The aqueous resin composition is free from problems of the occurrence of skin formation due to surface drying or the like although it contains no solvent having a high b.p., exhibits good stability, and is excellent in film-forming property. A recording material can be obtained by coating the composition on a substrate such as polyethylene terephthalate film.

IT 25212-19-5, WS 535

(aqueous resin composition for ink-jet recording material)

RN 25212-19-5 HCAPLUS

CN Hexanedioic acid, polymer with N-(2-aminoethyl)-1,2-ethanediamine and (chloromethyl)oxirane (9CI) (CA INDEX NAME)

CM 1

CRN 124-04-9 CMF C6 H10 O4

 HO_2C^- (CH₂)₄ - CO₂H

CM 2

CRN 111-40-0 CMF C4 H13 N3 $_{\rm H_2N-~CH_2-~CH_2-~NH-~CH_2-~CH_2-~NH_2}$

CM 3

CRN 106-89-8 CMF C3 H5 Cl O

CH2-C1

ICM C08L075-04 IC

ICS C08K003-00; C09D175-04; C09D005-02; B41M005-00

37-6 (Plastics Manufacture and Processing) CC

Section cross-reference(s): 38, 74

polyurethane aq compn ink jet recording ST

material; magnesium salt water soluble polyurethane compn

106-89-8D, Epichlorohydrin, reaction products with polyamides IT 39290-68-1, Gohsefimer Z 200 **25212-19-5**, WS 535

153130-79-1, Hydran HW 930 192526-56-0, 96595-50-5, CR 5L

210357-78-1, Vondic 2250 Hydran HW 970

(aqueous resin composition for ink-jet recording material)

THERE ARE 6 CITED REFERENCES AVAILABLE REFERENCE COUNT: 6 FOR THIS RECORD. ALL CITATIONS AVAILABLE

IN THE RE FORMAT

L80 ANSWER 6 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2001:733952 HCAPLUS

DOCUMENT NUMBER:

135:274332

TITLE:

Multilayer bright glossy coatings for automobiles and their manufacture Yoneda, Hirohito; Segawa, Daisuke; Tsuji,

INVENTOR (S):

Sachio; Fushimi, Tetsu

PATENT ASSIGNEE(S):

SOURCE:

Nippon Paint Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

LANGUAGE:

Patent Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001276724	A2	20011009	JP 2001-16050	2001 0124
GB 2360716	A1	20011003	< GB 2001-1976	2001 0125
GB 2360716 US 2001024694	B2 A1	20030910 20010927	< US 2001-769755	2001

0126 <--JP 2000-17261 Α PRIORITY APPLN. INFO.: 2000 0126

The coatings are manufactured by applying bright AB coating compns., which contain non-crosslinked polymer microparticles (average diameter 0.05-10 μm) and crosslinked polymer microparticles (average diameter 0.01-1 $\mu m)$ in the \mbox{weight} ratio of 5/1 to 1/5, on primed substrates and further applying clear topcoats. Thus, a composition comprising butoxymethylacrylamide-Et acrylate-2hydroxyethyl acrylate-methacrylic acid-Me methacrylate-Placcel FM 2 (OH-containing acrylic monomer) -styrene copolymer, Et acrylate-methacrylic acid -Placcel FM 1 (OH-containing acrylic monomer) copolymer, melamine resin (U-Van 20N60), a dispersion of Et acrylate -2-hydroxyethyl acrylate-methacrylic acid-Me methacrylate-styrene copolymer particles (diameter 0.18 μm), an emulsion of ethylene glycol dimethacrylate-Me methacrylate-styrene copolymer particles (diameter $0.07~\mu m)$, and Al pigment paste (Alumipaste 91-0562) was applied on a primed steel plate, over-coated with a clear coating (Mac Flow O 380) by a wet-on-wet method, and baked to give a coating showing gloss 96.2% and good flip-flop properties. 220833-13-6P, Azelaic acid-bishydroxyethyltaurine-Cardura IT E 10-neopentyl glycol-phthalic anhydride copolymer

(emulsifiers; manufacture of multilayer bright glossy coatings for automobiles)

220833-13-6 HCAPLUS RN Nonanedioic acid, polymer with 2-[bis(2-CN hydroxyethyl) amino ethanesulfonic acid, 2,2-dimethyl-1,3propanediol, 1,3-isobenzofurandione and oxiranylmethyl neodecanoate (9CI) (CA INDEX NAME)

CRN 26761-45-5 CMF C13 H24 O3 CCI IDS

1

CH2-O-C-(C9H19-neo)

CM 2

CM

CRN 10191-18-1 CMF C6 H15 N O5 S

$$\begin{array}{c} \text{CH}_2-\text{CH}_2-\text{OH} \\ | \\ \text{HO-CH}_2-\text{CH}_2-\text{N-CH}_2-\text{CH}_2-\text{SO}_3\text{H} \end{array}$$

CRN 126-30-7 CMF C5 H12 O2

4 CM

CRN 123-99-9 CMF C9 H16 O4

$$_{\rm HO_2C^-}$$
 (CH₂)₇-CO₂H

CM 5

CRN 85-44-9 C8 H4 O3 CMF

IC ICM B05D005-06

ICS B05D001-36; C09D005-29; C09D007-12; C09D201-00 42-10 (Coatings, Inks, and Related Products)

CC bright multilayer coating acrylic microparticle STautomobile; two coat one bake glossy coating

IT Aminoplasts

(acrylic; manufacture of multilayer bright glossy coatings for automobiles)

Polyesters, uses IT

(emulsifiers; manufacture of multilayer bright glossy coatings for automobiles)

ITCoating materials

(glossy; manufacture of multilayer bright glossy coatings for automobiles)

Automobiles IT

```
(manufacture of multilayer bright glossy coatings for
       automobiles)
IT
    Emulsifying agents
        (manufacturing crosslinked microparticles with; manufacture of multilayer
        bright glossy coatings for automobiles)
IT
    Dispersing agents
        (manufacturing non-crosslinked microparticles with; manufacture of
        multilayer bright glossy coatings for automobiles)
     Coating materials
IT
        (multilayer; manufacture of multilayer bright glossy
        coatings for automobiles)
IT
     Coating materials
        (two-layer-one-bake; manufacture of multilayer bright glossy
        coatings for automobiles)
     7429-90-5, Aluminum, uses 121630-48-6, Alumipaste 4919
IT
        (brightening pigment; manufacture of multilayer bright glossy
        coatings for automobiles)
     337972-40-4, Mac Flow O 380
IT
        (clear topcoat; manufacture of multilayer bright glossy
        coatings for automobiles)
     53196-70-6P, Ethylene glycol dimethacrylate-
IT
     methyl methacrylate-styrene copolymer
        (crosslinked microparticle; manufacture of multilayer bright glossy
        coatings for automobiles)
     363623-74-9P
IT
        (dispersant; manufacture of multilayer bright glossy
        coatings for automobiles)
     220833-13-6P, Azelaic acid-bishydroxyethyltaurine-Cardura
TΤ
     E 10-neopentyl glycol-phthalic anhydride copolymer
        (emulsifiers; manufacture of multilayer bright glossy
        coatings for automobiles)
     363623-75-0P
IT
        (manufacture of multilayer bright glossy coatings for
        automobiles)
     25464-22-6P, Ethyl acrylate-2-
IT
     hydroxyethyl acrylate-methacrylic
     acid-methyl methacrylate-
                        26915-97-9P
     styrene copolymer
        (non-crosslinked microparticle; manufacture of multilayer bright
        glossy coatings for automobiles)
     12597-69-2, steel, miscellaneous
IT
        (substrate; manufacture of multilayer bright glossy coatings
        for automobiles)
L80 ANSWER 7 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:673294 HCAPLUS
DOCUMENT NUMBER:
                         135:243833
                         Anticorrosive coating compositions for metal
TITLE:
                         surfaces
                         Saeki, Koichiro; Nakanishi, Hidetaka
INVENTOR(S):
                         Nippon Shokubai Kagaku Kogyo Co., Ltd., Japan
PATENT ASSIGNEE(S):
                         Jpn. Kokai Tokkyo Koho, 17 pp.
SOURCE:
                         CODEN: JKXXAF
                         Patent
DOCUMENT TYPE:
                         Japanese
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                                                    DATE
                                           APPLICATION NO.
                         KIND
                                DATE
     PATENT NO.
```

JP 2001247826

A2 20010914 JP

JP 2000-63999

2000 0308

PRIORITY APPLN. INFO.:

JP 2000-63999

2000

0308

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AB Title compns. contain 100 parts cationic and/or zwitterionic resins and 1-50 parts organic S compds. A galvanized steel plate was coated with an aqueous composition containing 3:100 tetrabutylthiuram disulfide (I) and acrylic acid

-Bu acrylate-ethyleneimine-Me methacrylate graft copolymer to a 0.7-μm thickness and baked at 120° to form a film with anticorrosion 4 times better than a film prepared similarly without the I.

IT 360041-91-4P

(crosslinked; organic S compound-containing cationic or zwitterionic resin coatings for metals for anticorrosion)

RN 360041-91-4 HCAPLUS

2-Propenoic acid, 2-methyl-, methyl ester, polymer with aziridine, butyl 2-propenoate, 4,5-dihydro-2-(1-methylethyl)oxazole and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CN

CRN 10471-78-0 CMF C6 H9 N O

CM 2

CRN 151-56-4 CMF C2 H5 N



CM 3

CRN 141-32-2 CMF C7 H12 O2

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{c|c} ^{H_2C} & \text{O} \\ \parallel & \parallel \\ \text{Me-} & \text{C-} & \text{C-} & \text{OMe} \end{array}$$

CM 5

CRN 79-10-7 CMF C3 H4 O2

138321-28-5P, Methacrylic acidbutyl acrylate-ethyleneimine-methyl methacrylate-styrene graft copolymer

360041-89-0P 360041-90-3P

(organic S compound-containing cationic or zwitterionic resin coatings for metals for anticorrosion)

RN 138321-28-5 HCAPLUS

2-Propenoic acid, 2-methyl-, polymer with aziridine, butyl 2-propenoate, ethenylbenzene and methyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 151-56-4 CMF C2 H5 N



CN

CM 2

CRN 141-32-2 CMF C7 H12 O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{n-BuO-C-CH------} \text{CH}_2 \end{array}$$

CRN 100-42-5 CMF C8 H8

$$_{\rm H_2C}$$
 CH $^-$ Ph

CM 4

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{ccc} ^{H_2C} & \text{O} \\ \parallel & \parallel \\ \text{Me-} & \text{C-} & \text{C-} & \text{OMe} \end{array}$$

CM 5

CRN 79-41-4 CMF C4 H6 O2

RN 360041-89-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with aziridine, butyl 2-propenoate and 2-propenoic acid, graft (9CI) (CA INDEX NAME)

CM 1

CRN 151-56-4 CMF C2 H5 N



CM 2

CRN 141-32-2

CMF C7 H12 O2

$$\overset{\text{O}}{\underset{\text{n-BuO-C-CH}}{\parallel}}\text{CH}_{2}$$

CM 3

CRN 80-62-6 CMF C5 H8 O2

CM 4

CRN 79-10-7 CMF C3 H4 O2

RN 360041-90-3 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with aziridine and methyl
2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 151-56-4 CMF C2 H5 N

H N /\

CM 2

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{ccc} ^{H_2C} & \text{O} \\ & \parallel & \parallel \\ \text{Me-} & \text{C-} & \text{C-} & \text{OMe} \end{array}$$

CRN 79-41-4 CMF C4 H6 O2

СН₂ || ме- С- СО₂Н

IC ICM C09D201-02

ICS C09D005-02; C23C022-05; C23C022-07; C09D005-08

CC 42-10 (Coatings, Inks, and Related Products)

Section cross-reference(s): 55, 56

IT 360041-91-4P 360041-92-5P

(crosslinked; organic S compound-containing cationic or zwitterionic resin coatings for metals for anticorrosion)

IT 138321-28-5P, Methacrylic acid-

butyl acrylate-ethyleneimine-methyl

methacrylate-styrene graft copolymer

360041-89-0P 360041-90-3P 360069-89-2P

(organic S compound-containing cationic or zwitterionic resin coatings for metals for anticorrosion)

L80 ANSWER 8 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2001:618433 HCAPLUS

DOCUMENT NUMBER:

135:187664

TITLE:

Process for forming abrasion-resistant antistatic layer for imaging element and imaging element containing said layer

INVENTOR (S):

Majumdar, Debasis; Eichorst, Dennis J.;

Tingler, Kenneth L.

PATENT ASSIGNEE(S):

Eastman Kodak Co., USA

SOURCE:

U.S. Pat. Appl. Publ., 13 pp., Cont.-in-part

of U.S. 6,190,846.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2001016303	A1	20010823	US 2000-735018	
				2000
				1212
			<	
US 6355406	B2	20020312	4000 453400	
US 6190846	B1	20010220	US 1998-173409	1998
				1015
			_	1013
			< US 1998-173409 A	.2
PRIORITY APPLN. INFO.:			US 1990-1/34U9 A	1998
				1015

AB The invention relates to a process for providing abrasion-resistant elec. conducting layers containing an

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electronically-conducting polymer and a polymeric binder.
process for forming an abrasion-resistant antistatic layer for an
imaging element comprises: adjusting the pH of an aqueous
composition of an electronically-conductive polymer to a pH of
.apprx.3 to .apprx.10, and combining the pH-adjusted aqueous
composition of the electronically-conductive polymer with an
aqueous composition at a pH >7 of a polyurethane
film-forming binder having a tensile elongation
to break of at least 50 and a Young's modulus measured at 2
elongation of at least 50000 psi. The process further comprises
applying the resulting coating composition to the imaging element,
thereby forming an abrasion-resistant antistatic layer on the
element. The antistatic layer coating composition of the present
invention can be applied to a wide variety of imaging elements,
including, for example, photog., electrostatog., photothermog.,
migration, electrothermog., dielec. recording and
thermal-dye-transfer imaging elements.
9002-98-6P, Polyaziridine
   (crosslinking agent; photog. films with abrasion-resistant
   antistatic layer containing electronically conducting polymer and)
9002-98-6 HCAPLUS
Aziridine, homopolymer (9CI) (CA INDEX NAME)
CM
     1
CRN 151-56-4
CMF C2 H5 N
```

ΙT

RN

CN

ICM G03C001-89 IC ICS H01B001-00; C08J003-02; C08K003-20 INCL 430529000 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes) 9002-98-6P, Polyaziridine TΤ (crosslinking agent; photog. films with abrasion-resistant antistatic layer containing electronically conducting polymer and)

L80 ANSWER 9 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:237920 HCAPLUS

DOCUMENT NUMBER: 134:267872

Antifogging compositions and their resin films TITLE:

for agricultural uses

Yamaqishi, Hiroshi; Arai, Hirotaka INVENTOR(S): Mitsubishi Kagaku MKV KK, Japan PATENT ASSIGNEE(S): Jpn. Kokai Tokkyo Koho, 8 pp. SOURCE:

CODEN: JKXXAF

Patent DOCUMENT TYPE: Japanese LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

DATE DATE APPLICATION NO. KIND PATENT NO. _____ _____

JP 2001089751

A2 20010403 JP 1999-268374

1999 0922

PRIORITY APPLN. INFO.:

JP 1999-268374

1999 0922

Title compns. comprise aqueous dispersions of hydrophobic resins (A) AB with glass-transition temperature (Tg) of 35-80°, aqueous polyurethane (B) compns., and colloidal sols (C) at B/A of 0.01-1:1, and C/(A + B) of 0.5-5. An aqueous compn . containing Bu methacrylate-Me methacrylate copolymer (with Tg 37°) 2.0, Takelac XW 74-CO3 0.6, and colloidal SiO2 5 parts was coated on a polyethylene film to form a film with good antifogging after facing to a 50° water container at 20° atom. for 1 mo and 3 h at 20° water container under 10° atmospheric 331764-16-0, Trimethylolpropane tris(3-IT aziridinopropionate) - Takelac WS 4000 copolymer

(antifogging agents containing acrylic resins with controlled glass transition temperature and polyurethanes and colloidal sols for mulches)

331764-16-0 HCAPLUS RNCN

1-Aziridinepropanoic acid, 2-[[3-(1-aziridinyl)-1oxopropoxy]methyl]-2-ethyl-1,3-propanediyl ester, polymer with Takelac WS 4000 (9CI) (CA INDEX NAME)

CM 1

CRN 331764-14-8 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 52234-82-9 CMF C21 H35 N3 O6

```
ICM C09K003-18
IC
    ICS A01G009-14; A01G013-02; C08J007-04
    42-13 (Coatings, Inks, and Related Products)
CC
     Section cross-reference(s): 5
    25585-75-5P, Acrylic acid-ethyl
IT
     acrylate-methyl methacrylate-
     styrene copolymer
     methyl methacrylate copolymer
        mulches)
     280109-44-6, Takelac W 605
IT
     331764-13-7, Takelac XW 74C03
        mulches)
     9002-86-2, PVC
IT
     Vinyl acetate-vinyl chloride
                9011-14-7, PMMA
     copolymer
```

25608-33-7P, Butyl methacrylate-

(antifogging agents containing acrylic resins with controlled glass transition temperature and polyurethanes and colloidal sols for

324742-99-6, Takelac W 6010 331764-14-8, Takelac WS 4000 331764-16-0, Trimethylolpropane tris(3aziridinopropionate)-Takelac WS 4000 copolymer

(antifogging agents containing acrylic resins with controlled glass transition temperature and polyurethanes and colloidal sols for

9002-88-4, Polyethylene 9003-22-9,

25038-59-9, PET polymer, uses (films; antifogging agents containing acrylic resins with controlled glass transition temperature and polyurethanes and colloidal sols for mulches)

L80 ANSWER 10 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: DOCUMENT NUMBER:

2000:851998 HCAPLUS 134:30462

TITLE:

٠.

Low-glossy and lead-free cationic electrodeposition compositions, film

formation and coated products

therewith

INVENTOR(S):

Murakami, Ryoichi; Bessho, Koji; Fukahara,

Yutaka

PATENT ASSIGNEE(S):

Nippon Paint Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000336287	A2	20001205	JP 1999-146376	1999 0526
PRIORITY APPLN. INFO.:			< JP 1999-146376	1999 0526
			<	

Title Sn catalyst-free compns. contain cationic resins, blocked AB isocyanates, and 0.2-1% (based on total solids) Zn+2-containing Zn compds. A phosphated steel plate was electrodeposited with an aqueous composition containing a pigment dispersion, 0.2% Zn+2-containing Zn acetate, and an emulsion (containing HCOOH, bisphenol A-DER 331J-diethylenetriamine-methylethanolamine copolymer, and Me Et ketoxime-blocked HMDI-trimethylolpropane copolymer) and baked

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at 150Å or 160° for 20 min to form a
     film with 60° gloss 58% and MIBK-resistant
    hardness, which could be further coated with middle and top coats
     to form a plate with high brightness.
     310906-22-0P, Bisphenol A-diethylenetriamine-HMDI-
IT
     methylethanolamine-trimethylolpropane-DER 331J copolymer formic
     acid salt 310906-24-2P, Aminoethanolamine-bisphenol
     A-diethanolamine-epichlorohydrin-methylethanolamine-TDI-HMDI
     trimer copolymer acetic acid salt
        (Pb-free, Zn compound-containing and NCO-crosslinked cationic resin
        electrodeposits with low gloss for steel)
     310906-22-0 HCAPLUS
RN
     1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)-, polymer with
CN
     N-(2-aminoethyl)-1,2-ethanediamine, (chloromethyl)oxirane,
     1,6-diisocyanatohexane, 2-(methylamino)ethanol and
     4,4'-(1-methylethylidene)bis[phenol], formate (9CI)
                                                         (CA INDEX
     NAME)
     CM
          1
     CRN 64-18-6
     CMF C H2 O2
O== CH- OH
     CM
          2
          310906-21-9
     CRN
          (C15 H16 O2 . C8 H12 N2 O2 . C6 H14 O3 . C4 H13 N3 . C3 H9 N
          O . C3 H5 Cl O)x
         PMS
     CCI
          CM
               3
          CRN 822-06-0
          CMF C8 H12 N2 O2
OCN- (CH2)6-NCO
          CM
               4
           CRN 111-40-0
           CMF C4 H13 N3
H_2N-CH_2-CH_2-NH-CH_2-CH_2-NH_2
           CM
                5
           CRN 109-83-1
           CMF C3 H9 N O
```

 $_{\rm HO-\,CH_2-\,CH_2-\,NH-\,CH_3}$

CM 6

106-89-8 CRN CMF C3 H5 Cl O

7 CM

CRN 80-05-7 C15 H16 O2 CMF

8 CM

CRN 77-99-6 CMF C6 H14 O3

$$_{
m HO-CH_2-C-Et}^{
m CH_2-OH}$$

310906-24-2 HCAPLUS RN

Phenol, 4,4'-(1-methylethylidene)bis-, polymer with CN (chloromethyl)oxirane, diaminoethanol, 1,6-diisocyanatohexane trimer, 1,3-diisocyanatomethylbenzene, 2,2'-iminobis[ethanol] and 2-(methylamino)ethanol, acetate (9CI) (CA INDEX NAME)

CM

CRN 64-19-7 CMF C2 H4 O2

CRN 310906-23-1

(C15 H16 O2 . C9 H6 N2 O2 . (C8 H12 N2 O2)3 . C4 H11 N O2 . C3 H9 N O . C3 H5 Cl O . C2 H8 N2 O) \times

CCI

CM 3

CRN 141456-92-0

CMF C2 H8 N2 O

CCI IDS

 H_3C-CH_2-OH

$$2 \left[D1-NH_2 \right]$$

CM4

CRN 26471-62-5

CMF C9 H6 N2 O2

CCI IDS

D1-Me

CM 5

CRN 111-42-2 CMF C4 H11 N O2

 $_{\text{HO}-\text{ CH}_2}-_{\text{CH}_2}-_{\text{NH}-\text{ CH}_2}-_{\text{CH}_2}-_{\text{OH}}$

CM 6

CRN 109-83-1 CMF C3 H9 N O HO-CH2-CH2-NH-CH3

7 CM

CRN 106-89-8 CMF C3 H5 Cl O

CM

CRN 80-05-7 CMF C15 H16 O2

CM 9

28574-90-5 CRN CMF (C8 H12 N2 O2)3 CCI PMS

> CM 10

CRN 822-06-0 CMF C8 H12 N2 O2

OCN-(CH₂)₆-NCO

IC ICM C09D005-44 ICS B05D001-36; C09D005-00; C09D007-12; C09D163-00; C09D175-04; C08G018-58; C08G018-80 42-10 (Coatings, Inks, and Related Products)

CC Section cross-reference(s): 55

low gloss lead free epoxy polyurethane cationic ST electrodeposit steel

Polyurethanes, uses IT

(epoxy, oxazolidinone group-containing; Pb-free, Zn compound-containing and NCO-crosslinked cationic resin electrodeposits with low gloss for steel)

Polyurethanes, uses IT

(epoxy-polyurea-; Pb-free, Zn compound-containing and NCO-crosslinked cationic resin electrodeposits with low gloss

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for steel)
```

IT Polyureas

(epoxy-polyurethane-; Pb-free, Zn compound-containing and NCO-crosslinked cationic resin electrodeposits with low gloss

Epoxy resins, uses IT

(polyurea-polyurethane-; Pb-free, Zn compound-containing and NCO-crosslinked cationic resin electrodeposits with low gloss for steel)

Epoxy resins, uses TΤ

(polyurethane-, oxazolidinone group-containing; Pb-free, Zn compound-containing and NCO-crosslinked cationic resin electrodeposits with low gloss for steel)

310906-22-0P, Bisphenol A-diethylenetriamine-HMDI-IT methylethanolamine-trimethylolpropane-DER 331J copolymer formic acid salt 310906-24-2P, Aminoethanolamine-bisphenol A-diethanolamine-epichlorohydrin-methylethanolamine-TDI-HMDI trimer copolymer acetic acid salt

(Pb-free, Zn compound-containing and NCO-crosslinked cationic resin electrodeposits with low gloss for steel)

253310-58-6P, Acrylic acid-butyl IT acrylate-diethylaminoethyl acrylate-

ethyl acrylate-ethylene glycol

dimethacrylate-2-hydroxyethyl acrylate-

methyl methacrylate-styrene

-N-methyl-N-(vinylbenzyl)taurine copolymer

(crosslinked particles; Pb-free, Zn compound-containing and NCO-crosslinked cationic resin electrodeposits with low gloss for steel)

L80 ANSWER 11 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2000:234041 HCAPLUS

DOCUMENT NUMBER:

132:266556

TITLE:

Gas-barrier film-forming

compositions and packaging films therefrom

Toda, Kinichi; Nomoto, Akira INVENTOR(S):

PATENT ASSIGNEE(S):

Tocero K. K., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000103993	A2	20000411	JP 1998-292968	1998 0930
PRIORITY APPLN. INFO.:			< JP 1998-292968	1998 0930

Title aqueous compns. comprise water-soluble NH2- or OH-containing polymers, AB water glass, and silane couplers. An aqueous compn . containing 77.6% (solid content) Li silicate, 13.8% KBM 403, 8.6% polyethyleneimine, and a wetting agent was spread on a PET film and baked to form a transparent film, which was laminated on a

LLDPE to form a laminate with 90° adhesion 230 g/15 mm and O permeability 0.2 cm3/m2-day at 20° and 80% relative humidity initially and 2.4 cm3/m2-day after 60° bending test under 20-kg load.

9002-98-6, Polyethylenimine IT

(aqueous compns. containing Li silicate and silane couplers and NH2- or OH-containing polymers for gas-barrier films for packaging laminates)

9002-98-6 HCAPLUS RN

Aziridine, homopolymer (9CI) (CA INDEX NAME) CN

CM 1

CRN 151-56-4 CMF C2 H5 N



ICM C09D007-12 IC

ICS B05D007-04; B05D007-24; C09D005-00; C09D129-04; C09D179-02;

C09D201-02; C09D201-06 42-10 (Coatings, Inks, and Related Products) CC

Section cross-reference(s): 38

9002-89-5, Poly(vinyl alcohol) 9002-98-6, IT

Polyethylenimine

(aqueous compns. containing Li silicate and silane couplers and NH2- or OH-containing polymers for gas-barrier films for packaging laminates)

L80 ANSWER 12 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2000:21649 HCAPLUS

DOCUMENT NUMBER:

132:79774

TITLE:

Improvement of weathering corrosion prevention effect of lead-free cationic electrodeposition

coatings

INVENTOR(S):

Hirata, Yasuyuki; Nomoto, Takeshi; Morimoto,

Tatsumi; Yaegashi, Hideaki

PATENT ASSIGNEE(S):

Kansai Paint Co., Ltd., Japan; Nissan Motor

Co., Ltd.

SOURCE:

Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent Japanese

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
 JP 2000007960	A2	20000111	JP 1998-192308	1998 0624
JP 3685297 PRIORITY APPLN. INFO.:	В2	20050817	< JP 1998-192308	1998

0624

Pb-free electrodeposition coating compns. forming AB films with heat shrinkage stress 100-120 kg/cm2 at 40°, Tg 70-90°, and impedance \geq 108 Ω -cm2 are used to show improved corrosion prevention effect. Thus, treating 518 parts bisphenol A (I)-epichlorohydrin copolymer with 57 parts I in presence of PhCH2NMe2, further treating the product with 144.2 parts ε-caprolactone in presence of Ti(OBu)4, 148 parts I in presence of PhCH2NMe2, and 25.6 parts Et2NH and 68.3 parts diethanolamine, and diluting with MEK gave an amine-modified epoxy resin solution (A). A Zn phosphate-treated steel sheet was electrophoretically coated with an aqueous composition containing A 80 (solids), blocked MDI-trimethylolpropane adduct 20, dibutyltin dibenzoate 1.0, 10% AcOH 16, and a Bi(OH)3-containing pigment paste 72 parts, baked, and further coated with middle and top coatings to give a test piece showing the shrinkage stress 105 kg/cm2, Tg 85°, impedance 109 $\Omega\text{-cm2},$ and good corrosion resistance.

IT 253668-72-3DP, reaction products with diethylamine and MDI-trimethylolpropane adduct

(lead-free cationic electrodeposition coatings with improved weathering corrosion prevention effect)

RN 253668-72-3 HCAPLUS

CN 2-Oxepanone, polymer with (chloromethyl)oxirane, 2,2'-iminobis[ethanol] and 4,4'-(1-methylethylidene)bis[phenol], graft (9CI) (CA INDEX NAME)

CM 1

CRN 502-44-3 CMF C6 H10 O2



CM 2

CRN 111-42-2 CMF C4 H11 N O2

 $_{\rm HO-~CH_2-~CH_2-~NH-~CH_2-~CH_2-OH}$

CM 3

CRN 106-89-8 CMF C3 H5 Cl O CH2-C1

CM

CRN 80-05-7 C15 H16 O2 CMF

ICM C09D005-44 IC

ICS C09D163-00; C09D175-04; B05D007-14

42-7 (Coatings, Inks, and Related Products) CC

Section cross-reference(s): 55

polycaprolactone epoxy resin electrodeposition coating ST anticorrosive; weatherability electrodeposit amine adduct epoxy resin

Polyesters, uses IT Polyesters, uses

(epoxy, graft, polyisocyanate-crosslinked; lead-free cationic electrodeposition coatings with improved weathering

corrosion prevention effect)

Epoxy resins, uses IT

Epoxy resins, uses

(polyester-, graft, polyisocyanate-crosslinked; lead-free cationic electrodeposition coatings with improved weathering corrosion prevention effect)

101-68-8DP, MDI, polymers with epoxy resin-amine adducts IT 109-89-7DP, Diethylamine, reaction products with polycaprolactoneepoxy resin graft polymers and MDI-trimethylolpropane 141182-64-1DP, polymers with epoxy resin-amine adducts 253668-72-3DP, reaction products with diethylamine and MDI-trimethylolpropane adduct (lead-free cationic electrodeposition coatings with improved weathering corrosion prevention effect)

L80 ANSWER 13 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

1999:310996 HCAPLUS ACCESSION NUMBER:

131:20322 DOCUMENT NUMBER:

Chromate film-free anticorrosive steel panels TITLE:

Yoshimi, Naoto; Sasaki, Kenichi; Sugimoto, INVENTOR(S):

Yoshiharu; Sagiyama, Masaru Nippon Kokan Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 18 pp.

CODEN: JKXXAF

Patent DOCUMENT TYPE: Japanese LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT ASSIGNEE(S):

SOURCE:

```
APPLICATION NO.
                  KIND
                                                               DATE
    PATENT NO.
                                         -----
    -----
                       ----
                A2 19990518
                                         JP 1997-314281
    JP 11128830
                                                               1997
                                                               1030
                                            <--
                                         JP 1997-314281
PRIORITY APPLN. INFO.:
                                                               1997
                                                                1030
    Title panels are prepared by forming phosphoric acid- and/or
AB
    phosphate-containing polymeric chelating agent-based films on Zn- or
    Al-plated steel panels. A galvanized steel panel was coated with
    an aqueous composition containing iminomethylenephosphoric
     acid group-containing polyethylene to a 0.5-µm thickness and dried
     at 150° to form a film with good
     adhesion to the panel and anticorrosion (JIS Z 2371) over 48 h.
     9002-98-6D, iminomethylenephosphoric acid group-containing
IT
     26913-06-4D, Poly[imino(1,2-ethanediyl)],
     iminomethylenephosphoric acid group-containing
        (phosphato polymeric chelating agent-based coatings on Zn- or
        Al-plated steel for anticorrosion)
     9002-98-6 HCAPLUS
RN
     Aziridine, homopolymer (9CI) (CA INDEX NAME)
CN
     CM
          1
     CRN 151-56-4
     CMF C2 H5 N
     26913-06-4 HCAPLUS
RN
     Poly[imino(1,2-ethanediyl)] (9CI) (CA INDEX NAME)
ICM B05D007-14
 IC
     ICS C23C022-00; C23C022-07
     42-10 (Coatings, Inks, and Related Products)
 CC
     Section cross-reference(s): 55
     Acrylic polymers, uses
 IT
       Epoxy resins, uses
      Phenolic resins, uses
      Polyamines
         (phosphato group-containing; phosphato polymeric chelating
        agent-based coatings on Zn- or Al-plated steel for
        anticorrosion)
      9002-86-2D, PVC, iminomethylenephosphoric acid group-containing
 IT
      9002-88-4D, Polyethylene, iminomethylenephosphoric acid
```

group-containing 9002-89-5D, Poly(vinyl alcohol),

iminomethylenephosphoric acid group-containing 9002-98-6D,

iminomethylenephosphoric acid group-containing 9003-01-4D, Poly(acrylic acid), imino or aminoalkylenephosphoric acid group-containing 9003-70-7D, Divinylbenzene-styrene copolymer, iminomethylenephosphoric acid group-containing 9005-25-8D, Starch, iminomethylenephosphoric acid group-containing, uses 25322-68-3D, Poly(ethylene glycol), iminomethylenephosphoric acid group-containing 26913-06-4D, Poly[imino(1,2-ethanediyl)], iminomethylenephosphoric acid group-containing (phosphato polymeric chelating agent-based coatings on Zn- or

Al-plated steel for anticorrosion)

L80 ANSWER 14 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1999:97326 HCAPLUS

DOCOMENT M

130:197678

TITLE:

Agricultural fluoropolymer films with good transparency and long-lasting antifogging

property

INVENTOR (S):

Yamakishi, Hiroshi; Makimura, Akira; Iwase,

Keiko; Momodaira, Satoru

PATENT ASSIGNEE(S):

Mitsubishi Kagaku MKV KK, Japan Jpn. Kokai Tokkyo Koho, 9 pp.

SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
 JP 11034250	A2	19990209	JP 1997-198279	1997 0724
PRIORITY APPLN. INFO.:			< JP 1997-198279	1997 0724

Title films are obtained by forming coating films from AΒ antifogging agent compns. containing (a) hydrolyzable silyl group-having vinyl copolymers, (b) inorg. colloid sols (solid weight ratio of (b)/(a) = 0.5-9, and (c) water and/or water-soluble solvents on one or both sides of fluoropolymer films. Thus, a 46.3:0.7:53 (mol) ethylene -perfluorobutylethylene-tetrafluoroethylene copolymer film was treated with corona discharge, coated with a composition containing a polymer solution (nonvolatile matter 60%; prepared from Me methacrylate 120, Bu acrylate 75, 2-hydroxyethyl methacrylate 30, N, N-dimethylaminoethyl methacrylate 30, and γ methacryloxypropyltrimethoxysilane 45 parts) 2, colloidal silica (average particle size 40 nm) 3, Epiclon 860 (epoxy compound) 0.1, and tetraethylenepentamine 0.05 part, and dried to give a coated film with good transparency and long-lasting antifogging property.

IT 180592-46-5P, Butyl acrylate
-N,N-dimethylaminoethyl methacrylate-Epiclon 860-2-hydroxyethyl methacrylate-(γ-methacryloxypropyl)trimethoxysilane-methyl methacrylate-tetraethylenepentamine

copolymer 180592-47-6P, Butyl methacrylate; N, N-dimethylaminoethyl methacrylate; Epiclon 860; 2-hydroxyethyl methacrylate; (γ-methacryloxypropyl) trimethoxyethoxysilanemethyl methacrylate-tetraethylenepentamine copolymer

(antifogging coatings; agricultural fluoropolymer films with good transparency and long-lasting antifogging property)

RN 180592-46-5 HCAPLUS

2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with N-(2-aminoethyl)-N'-[2-[(2-aminoethyl)amino]ethyl]-1,2-ethanediamine, butyl 2-propenoate, (chloromethyl)oxirane, 2-hydroxyethyl 2-methyl-2-propenoate, 4,4'-(1-methylethylidene)bis[phenol], methyl 2-methyl-2-propenoate and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CN

CRN 2867-47-2 CMF C8 H15 N O2

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ & \parallel & \parallel \\ \text{Me}_2 \text{N--CH}_2 \text{--CH}_2 \text{--O-C--C--Me} \end{array}$$

CM 2

CRN 2530-85-0 CMF C10 H20 O5 Si

$$egin{array}{lll} H_2C & O & OMe \\ & & & & & \\ Me-C-C-O-(CH_2)_3-Si-OMe \\ & & & \\ OMe \\ \end{array}$$

CM 3

CRN 868-77-9 CMF C6 H10 O3

$$^{\rm H_2C}$$
 O $^{\rm H_2}$ $^{\rm H_2}$ $^{\rm Me-}$ C-C-O-CH₂-CH₂-OH

CM 4

CRN 141-32-2 CMF C7 H12 O2

$$\begin{array}{c}
0 \\
\parallel \\
n-BuO-C-CH \longrightarrow CH_2
\end{array}$$

CRN 112-57-2 CMF C8 H23 N5

CM 6

CRN 106-89-8 CMF C3 H5 Cl O

CM 7

CRN 80-62-6 CMF C5 H8 O2

$$^{\text{H}_2\text{C}}_{||}$$
 $^{\text{O}}_{||}$ $^{\text{Me}-\text{C}-\text{C}-\text{OMe}}$

CM 8

CRN 80-05-7 CMF C15 H16 O2

RN 180592-47-6 HCAPLUS

2-Propenoic acid, 2-methyl-, butyl ester, polymer with N-(2-aminoethyl)-N'-[2-[(2-aminoethyl)amino]ethyl]-1,2-ethanediamine, (chloromethyl)oxirane, 2-(dimethylamino)ethyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, 4,4'-(1-methylethylidene)bis[phenol], methyl 2-methyl-2-propenoate

and 3-[tris(2-methoxyethoxy)silyl]propyl 2-methyl-2-propenoate
(9CI) (CA INDEX NAME)

CM 1

CRN 57069-48-4 CMF C16 H32 O8 Si

CM 2

CRN 2867-47-2 CMF C8 H15 N O2

CM 3

CRN 868-77-9 CMF C6 H10 O3

CM 4

CRN 112-57-2 CMF C8 H23 N5

$$_{\rm H_2N-~CH_2-~CH_2-~NH-~CH_2-~CH_2-~NH-~CH_2-~CH_2-~NH-~CH_2-~CH_2-~NH_2-~CH_2-~NH_2-~$$

CM 5

CRN 106-89-8 CMF C3 H5 Cl O

CRN 97-88-1 CMF C8 H14 O2

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{n-BuO-C-C-Me} \end{array}$$

CM

CRN 80-62-6 CMF C5 H8 O2

CM

CRN 80-05-7 C15 H16 O2 CMF

IC ICM B32B027-30

ICS A01G009-14; A01G013-02; B05D007-24; B32B027-18

38-3 (Plastics Fabrication and Uses) CC

Section cross-reference(s): 19, 42

agricultural fluoropolymer film transparency; antifogging ST coating agricultural fluoropolymer film; vinyl copolymer coating agricultural film; inorg colloid vinyl copolymer coating

Crosslinking agents IT

(antifogging coatings containing; agricultural fluoropolymer films with good transparency and long-lasting antifogging property)

Antifogging agents ΙT

(coatings; agricultural fluoropolymer films with good transparency and long-lasting antifogging property)

7631-86-9, Colloidal silica, uses IT

```
(antifogging coatings containing; agricultural
        fluoropolymer films with good transparency and long-lasting
        antifogging property)
     180592-46-5P, Butyl acrylate
IT
     -N, N-dimethylaminoethyl methacrylate-Epiclon 860-2-hydroxyethyl
     methacrylate-(γ-methacryloxypropyl)trimethoxysilane-
     methyl methacrylate-tetraethylenepentamine
     copolymer 180592-47-6P, Butyl methacrylate; N, N-
     dimethylaminoethyl methacrylate; Epiclon 860; 2-hydroxyethyl
     methacrylate; (γ-methacryloxypropyl)trimethoxyethoxysilane-
     methyl methacrylate-tetraethylenepentamine
                 220698-76-0P, Dibutyl fumarate-N,N-dimethylaminoethyl
     copolymer
     methacrylate-(\gamma-glycidoxypropyl)trimethoxysilane-
     methyl methacrylate-styrene copolymer
        (antifogging coatings; agricultural fluoropolymer
        films with good transparency and long-lasting antifogging
        property)
     25038-71-5P, Ethylene-tetrafluoroethylene copolymer
IT
     68258-85-5P, Ethylene-perfluorobutylethylene-
                                     69288-57-9P, Ethylene
     tetrafluoroethylene copolymer
     -perfluorohexylethylene-tetrafluoroethylene copolymer
        (base film; agricultural fluoropolymer films with good
        transparency and long-lasting antifogging property)
     1344-28-1, Alumina, uses
IT
        (colloidal, antifogging coatings containing; agricultural
        fluoropolymer films with good transparency and long-lasting
        antifogging property)
                               7732-18-5, Water, uses
     64-17-5, Ethanol, uses
IT
        (solvent, antifogging coatings containing; agricultural
        fluoropolymer films with good transparency and long-lasting
        antifogging property)
L80 ANSWER 15 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN
                          1998:175983 HCAPLUS
ACCESSION NUMBER:
                          128:206013
DOCUMENT NUMBER:
                          Aqueous modified polyurethane coating
TITLE:
                          compositions, their production and use
                          for producing multilayered enamel automotive
                          coatings
                          Vogt-Birnbrich, Bettina; Gobel, Armin; Dobert,
INVENTOR(S):
                          Jurgen; Brunner, Marcus
                          Herberts G.m.b.H., Germany; Vogt-Birnbrich,
PATENT ASSIGNEE(S):
                          Bettina; Gobel, Armin; Dobert, Jurgen;
                          Brunner, Marcus
                          PCT Int. Appl., 43 pp.
SOURCE:
                          CODEN: PIXXD2
                          Patent
DOCUMENT TYPE:
                          German
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
```

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9810028	A1	19980312	WO 1997-EP4821	1997 0905

W: AU, BR, CA, CZ, JP, KR, MX, PL, SI, US
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC,

```
NL, PT, SE
                                           AU 1997-43016
                               19980326
                         A1
    AU 9743016
                                                                   1997
                                                                   0905
                                               <--
                               19990623
                                           EP 1997-919037
                         A1
    EP 923626
                                                                   1997
                                                                   0905
                                               <--
                               19991215
    EP 923626
                         B1
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE
                                           AT 1997-919037
                               20000115
                         E
    AT 187754
                                                                   1997
                                                                   0905
                                               <--
                                20000516
                                            ES 1997-919037
                         Т3
    ES 2143860
                                                                   1997
                                                                   0905
                                               <--
                                            JP 1998-512249
                         T2
                                20010123
    JP 2001500903
                                                                   1997
                                                                   0905
                                               <--
                                            US 1999-254416
                                20000530
                         Α
    US 6069218
                                                                    1999
                                                                    0308
                                               <--
                                            DE 1996-19636189
PRIORITY APPLN. INFO.:
                                                                    1996
                                                                    0906
                                               <--
                                            WO 1997-EP4821
                                                                    1997
                                                                    0905
```

As binders, these aqueous coating compns. contain an aqueous ΔR dispersion based on Si-modified acrylic polyurethanes with an number average mol. wt.from 8,000-1, 500,000, a weight ratio of polyurethane-acrylic polymer (0.05-50):1, a OH number 0-150 mg KOH/g (relative to the solid resin, hydroxyl groups bound to Si are not counted when calculating the OH number), an acid number 1.5-40 mg KOH/g (relative to the solid resin), and Si content 0.5-150 mmol/100 g solid resin in the form of siloxane bridges incorporated into the polyurethane fraction and/or in the form of silanol groups bonded to the polyurethane fraction. The coatings have higher covering power and are depositable by spraying. A typical binder is manufactured by polymerizing 55.8 g isophorone diisocyanate with 145.5 g adipic acid-neopentyl glycol-isophthalic acid copolymer (OH number 109 mg KOH/g) and 8 g dimethylolpropionic acid in NMP at 80° until the NCO content is 2%, adding 3-aminopropyltriethoxysilane 7, dodecanol 12.2, and hydroxyethyl methacrylate 2 g, heating at 80° until no NCO group content is observed, adding Me methacrylate 128, Et3N 5.4, and water 5.4 g, dispersing the reaction mixture in 864 g water, adding 250 g Bu acrylate, 125 g tert-Bu acrylate and a solution of 62 g water containing 2 g (NH4)2S2O8, and heating 3 h at 80°. 204063-43-4DP, Adipic acid-neopentyl glycol-IT cyclohexanedicarboxylic acid-dimethylolpropionic

acid-isophorone diisocyanate-diethanolamine-2-hydroxyethyl

RN 20 CN CY 1 he 3 2 tr

methacrylate-methyl methacrylate-butyl
acrylate-tert-butyl acrylate graft
copolymer, reaction products with aminopropyltriethoxysilane
(aqueous silicon-modified acrylic polyurethane coating
compns. for producing multilayered enamel automotive
coatings)

204063-43-4 HCAPLUS
Cyclohexanedicarboxylic acid, polymer with butyl 2-propenoate,
1,1-dimethylethyl 2-propenoate, 2,2-dimethyl-1,3-propanediol,
hexanedioic acid, 2-hydroxyethyl 2-methyl-2-propenoate,
3-hydroxy-2-(hydroxymethyl)-2-methylpropanoic acid,
2,2'-iminobis[ethanol], 5-isocyanato-1-(isocyanatomethyl)-1,3,3-

trimethylcyclohexane and methyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 31290-91-2 CMF C8 H12 O4 CCI IDS



CM 2

CRN 4767-03-7 CMF C5 H10 O4

CM 3

CRN 4098-71-9 CMF C12 H18 N2 O2

CRN 1663-39-4 CMF C7 H12 O2

CM 5

CRN 868-77-9 CMF C6 H10 O3

$$^{\rm H_2C}_{\parallel}$$
 о $^{\rm Me-C-C-O-CH_2-CH_2-OH}_{\parallel}$

CM 6

CRN 141-32-2 CMF C7 H12 O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{n-BuO-C-CH-----} \text{CH}_{2} \end{array}$$

CM 7

CRN 126-30-7 CMF C5 H12 O2

$$\begin{array}{c} \text{Me} \\ \mid \\ \text{HO-CH}_2\text{-C-CH}_2\text{-OH} \\ \mid \\ \text{Me} \end{array}$$

```
CM
      8
```

•

CRN 124-04-9 CMF C6 H10 O4

 $HO_2C-(CH_2)_4-CO_2H$

CM 9

CRN 111-42-2 CMF C4 H11 N O2

 $_{\rm HO-~CH_2-~CH_2-~NH-~CH_2-~CH_2-~OH}$

CM 10

CRN 80-62-6 CMF C5 H8 O2

H₂C 0 $Me^-C^-C^-OMe$

CN

204063-45-6DP, reaction products with IT

aminopropyltriethoxysilane

(aqueous silicon-modified acrylic polyurethane coating compns. for producing multilayered enamel automotive coatings)

RN

204063-45-6 HCAPLUS Cyclohexanedicarboxylic acid, polymer with butyl 2-propenoate, 1,1-dimethylethyl 2-propenoate, 2,2-dimethyl-1,3-propanediol, formaldehyde, hexanedioic acid, 2-hydroxyethyl 2-methyl-2-propenoate, 3-hydroxy-2-(hydroxymethyl)-2-methylpropanoic acid, 2,2'-iminobis[ethanol], 5-isocyanato-1-(isocyanatomethyl) -1,3,3-trimethylcyclohexane, methyl 2-methyl-2-propenoate and 1,3,5-triazine-2,4,6-triamine, graft (9CI) (CA INDEX NAME)

1 CM

31290-91-2 CRN CMF C8 H12 O4 CCI IDS

$$_2$$
 $\left[$ D1-CO₂H $\right]$

CRN 4767-03-7 CMF C5 H10 O4

$$\begin{array}{c} & \text{Me} \\ | \\ \text{HO-CH}_2-\text{C-CO}_2\text{H} \\ | \\ \text{CH}_2-\text{OH} \end{array}$$

CM 3

CRN 4098-71-9 CMF C12 H18 N2 O2

CM 4

CRN 1663-39-4 CMF C7 H12 O2

CM 5

CRN 868-77-9 CMF C6 H10 O3

CRN 141-32-2 CMF C7 H12 O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{n-BuO-C-CH} \end{array} \text{CH}_2$$

CM 7

CRN 126-30-7 CMF C5 H12 O2

$$\begin{array}{c} & \text{Me} \\ | \\ \text{HO-} \, \text{CH}_2 - \text{C--} \, \text{CH}_2 - \text{OH} \\ | \\ \text{Me} \end{array}$$

CM 8

CRN 124-04-9 CMF C6 H10 O4

$$_{{
m HO_2C^-}}$$
 (CH₂)₄-CO₂H

CM 9

CRN 111-42-2 CMF C4 H11 N O2

$$_{\mathrm{HO-CH_2-CH_2-NH-CH_2-CH_2-OH}}$$

CM 10

CRN 108-78-1 CMF C3 H6 N6

```
NH2
N N NH2
```

CRN 80-62-6 CMF C5 H8 O2

CM 12

CRN 50-00-0 CMF C H2 O

ICM C09D175-04

$H_2C = 0$

IC

42-10 (Coatings, Inks, and Related Products) CC silicon modified acrylic polyurethane waterborne coating ; dodecanol modified acrylic polyurethane waterborne coating; tert butyl acrylate modified polyurethane coating; methacrylate modified polyurethane waterborne coating; aminopropyltriethoxysilane modified polyurethane waterborne coating; dimethylolpropionate polyester polyurethane acrylic waterborne coating; neopentyl glycol polyester polyurethane waterborne coating ; adipate polyester polyurethane acrylic coating; polyester polyurethane acrylic waterborne coating; automotive waterborne enamel coating modified polyurethane Polyurethanes, uses IT (acrylic-polyester-, graft, acrylic-polyurethane-, graft; aqueous silicon-modified acrylic polyurethane coating compns. for producing multilayered enamel automotive coatings Polyurethanes, uses IT (acrylic-polyester-, graft; aqueous silicon-modified acrylic polyurethane coating compns. for producing multilayered enamel automotive coatings) Polyesters, uses IT (acrylic-polyurethane-, graft, acrylic-polyurethane-, graft; aqueous silicon-modified acrylic polyurethane coating compns. for producing multilayered enamel automotive coatings) Coating materials IT

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(water-thinned; aqueous silicon-modified acrylic polyurethane
coating compns. for producing multilayered enamel
automotive coatings)
```

919-30-2DP, reaction products with graft acrylic-polyurethanes IT 27342-88-7DP, Dodecanol, reaction products with silicon-modified 204063-42-3DP, Adipic acid-neopentyl graft acrylic-polyurethanes glycol-isophthalic acid-dimethylolpropionic acid-isophorone diisocyanate-2-hydroxyethyl methacrylate-methyl methacrylate-butyl acrylate-tertbutyl acrylate graft copolymer, reaction products with aminopropyltriethoxysilane and dodecanol 204063-43-4DP, Adipic acid-neopentyl glycolcyclohexanedicarboxylic acid-dimethylolpropionic acid-isophorone diisocyanate-diethanolamine-2-hydroxyethyl methacrylate-methyl methacrylate-butyl acrylate-tert-butyl acrylate graft copolymer, reaction products with aminopropyltriethoxysilane (aqueous silicon-modified acrylic polyurethane coating compns. for producing multilayered enamel automotive

coatings)
IT 204063-44-5DP, reaction products with aminopropyltriethoxysilane
and dodecanol 204063-45-6DP, reaction products with
aminopropyltriethoxysilane

(aqueous silicon-modified acrylic polyurethane coating compns. for producing multilayered enamel automotive coatings)

REFERENCE COUNT:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L80 ANSWER 16 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1998:10574 HCAPLUS

DOCUMENT NUMBER:

128:103441

TITLE:

Cationic electrodeposition coating

compositions

INVENTOR(S):

Nakashio, Masaaki; Kawashima, Junko

PATENT ASSIGNEE(S):

Shinto Paint Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

Japanese

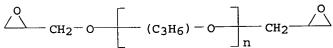
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09328640	A2	19971222	JP 1996-174316	1996 0612
PRIORITY APPLN. INFO.:			< JP 1996-174316	1996 0612

AB Title compns., which could **form films** having good smoothness, contain cationic resins (A) and blocked polyisocyanates (B), optionally and water-insol. components (C) with sp. weight of A, B, or C of ≤2.0. An **aqueous** composition containing a pigment dispersion, HCOOH, bisphenol A-Epo

ACQUAH 09/613,425 Tohto YD 128-Gurishieru PP 300P copolymer diethanolamine reaction product, and ε-caprolactam- and ethylene glycol monobutyl ether-blocked Millionate MR 400 was electrodeposited on a phosphated steel panel to a 20-µm thickness and baked at 175° for 25 min to form a panel with good horizontal smoothness. 201348-92-7P 201348-96-1P IT (electrodepositing coatings containing low sp. weight cationic resins and blocked polyisocyanates for smoothness) 201348-92-7 HCAPLUS RNFormic acid, compd. with (chloromethyl)oxirane polymer CN2,2'-iminobis[ethanol], 4,4'-(1-methylethylidene)bis[phenol], α -(oxiranylmethyl)- ω -(oxiranylmethoxy)poly[oxy(methyl-1,2-ethanediyl)] and polymethylenepolyphenylene isocyanate (9CI) (CA INDEX NAME) CM 1 CRN 64-18-6 CMF C H2 O2 o=== сн- он CM 2 CRN 194368-03-1 (C15 H16 O2 . C4 H11 N O2 . (C3 H6 O) n C6 H10 O3 . C3 H5 Cl O CMF . Unspecified)x CCI PMS CM 3 CRN 26142-30-3 CMF (C3 H6 O)n C6 H10 O3 CCI IDS, PMS



CM 4

CRN 9016-87-9 Unspecified CMF PMS, MAN CCI

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 5

CRN 111-42-2 CMF C4 H11 N O2 CM 6

CRN 106-89-8 CMF C3 H5 Cl O

CM 7

CRN 80-05-7 CMF C15 H16 O2

RN 201348-96-1 HCAPLUS

CN Formic acid, compd. with (chloromethyl)oxirane polymer with N,N-diethyl-1,3-propanediamine, 2,2'-iminobis[ethanol], (1-methylethylidene)bis[phenol] and polymethylenepolyphenylene isocyanate (9CI) (CA INDEX NAME)

CM 1

CRN 64-18-6 CMF C H2 O2

О== СН− ОН

CM 2

CRN 201348-95-0

CMF (C15 H16 O2 . C7 H18 N2 . C4 H11 N O2 . C3 H5 Cl O . Unspecified)x

CCI PMS

CM 3

CRN 9016-87-9 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

111-42-2 CRN C4 H11 N O2 CMF

 $_{\rm HO-~CH_2-~CH_2-~NH-~CH_2-~CH_2-~OH}$

CM 5

CRN 106-89-8 CMF C3 H5 Cl O

CM

CRN 104-78-9 CMF C7 H18 N2

 $H_2N-(CH_2)_3-NEt_2$

CM 7

CRN 80-05-7 CMF C15 H16 O2

ICM C09D005-44 IC

ICS C09D163-00; C09D175-04

42-10 (Coatings, Inks, and Related Products) CC

Polyurethanes, uses IT

Polyurethanes, uses

(epoxy; electrodepositing coatings containing low sp. weight cationic resins and blocked polyisocyanates for smoothness)

Acrylic polymers, uses IT

Epoxy resins, uses

Epoxy resins, uses

(polyurethane-; electrodepositing coatings containing low sp. weight cationic resins and blocked polyisocyanates for smoothness)

111-76-2, Ethylene glycol 105-60-2, reactions IT

monobutyl ether

(blocking agent; electrodepositing coatings containing low sp. weight

cationic resins and blocked polyisocyanates for smoothness) 201348-94-9P 201348-96-1P 201348-92-7P IT (electrodepositing coatings containing low sp. weight cationic resins and blocked polyisocyanates for smoothness)

L80 ANSWER 17 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1997:759841 HCAPLUS

DOCUMENT NUMBER:

128:62947

TITLE:

High-build polyester coating

compositions with good processability

and weather and chemical resistance for metals

Imai, Kensuke; Tajika, Hiroshi INVENTOR(S):

PATENT ASSIGNEE(S):

Toyobo Co., Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JР 09302305	A2	19971125	JP 1996-116454	1996 0510
PRIORITY APPLN. INFO.:			< JP 1996-116454	1996 0510

The title compns. comprise (A) polyesters (reduced viscosity AΒ ≥0.2 dL/g, Tg 0-90°) from acid components containing 87-100 mol% aromatic dicarboxylic acids, (B) hardeners, and (C) plasticizers at A/B = 95/5 to 60/40 and A/C = 95/5 to 60/40 in weight ratios. A polyester from 39:47:13:1 (molar) terephthalic acid-isophthalic acid-sebacic acid-trimellitic acid and 40:60 (molar) ethylene glycol-neopentyl glycol was used with Et phthalyl Et glycolate 67, Coronate 2507 25, dibutyltin dilaurate 0.25, titania 192, and Polyflow S 0.5 phr. 200205-71-6P, Melamine-formaldehyde-terephthalic IT acid-isophthalic acid-sebacic acid-trimellitic acidethylene glycol-neopentyl glycol copolymer

(high-build polyester coating compns. with good processability and weather and chemical resistance for metals)

200205-71-6 HCAPLUS RN CN

1,2,4-Benzenetricarboxylic acid, polymer with 1,3benzenedicarboxylic acid, 1,4-benzenedicarboxylic acid, decanedioic acid, 2,2-dimethyl-1,3-propanediol, 1,2-ethanediol, formaldehyde and 1,3,5-triazine-2,4,6-triamine (9CI) (CA INDEX NAME)

CM 1

CRN 528-44-9 CMF C9 H6 O6

CRN 126-30-7 CMF C5 H12 O2

$$\begin{array}{c} & \text{Me} \\ | \\ \text{HO-} \ \text{CH}_2 - \text{C--} \ \text{CH}_2 - \text{OH} \\ | \\ \text{Me} \end{array}$$

CM 3

CRN 121-91-5 CMF C8 H6 O4

CM 4

CRN 111-20-6 CMF C10 H18 O4

$$_{\rm HO_2C^-}$$
 (CH₂)₈-CO₂H

CM 5

CRN 108-78-1 CMF C3 H6 N6

CRN 107-21-1 CMF C2 H6 O2

 $_{\rm HO^-CH_2^-CH_2^-OH}$

CM 7

CRN 100-21-0 CMF C8 H6 O4

CM 8

CRN 50-00-0 CMF C H2 O

 $H_2C = 0$

IC ICM C09D167-02 ICS C09D167-02; C09D161-32; C09D163-00; C09D175-06

CC 42-10 (Coatings, Inks, and Related Products)

ST polyester high build coating

IT Coating materials

(chemical resistant; high-build polyester **coating** compns. with good processability and weather and chemical resistance for metals)

IT Polyesters, uses

Polyesters, uses

(epoxy; high-build polyester coating

compns. with good processability and weather and chemical resistance for metals)

IT Plasticizers

(high-build polyester coating compns. with good processability and weather and chemical resistance for metals)

IT Epoxy resins, uses

```
Epoxy resins, uses
     Polyurethanes, uses
        (polyester-; high-build polyester coating compns.
        with good processability and weather and chemical resistance for
        metals)
    Coating materials
IT
        (weather-resistant; high-build polyester coating
        compns. with good processability and weather and chemical
        resistance for metals)
     200205-70-5P, Terephthalic acid-isophthalic acid-sebacic
IT
     acid-trimellitic acid-ethylene glycol-neopentyl
    glycol-Coronate 2507 copolymer 200205-71-6P, Melamine-
     formaldehyde-terephthalic acid-isophthalic acid-sebacic
     acid-trimellitic acid-ethylene glycol-neopentyl glycol
                 200205-72-7P, Terephthalic acid-isophthalic acid-
     ethylene glycol-1,5-pentanediol-trimethylolpropane-
                               200205-73-8P, Terephthalic
     Coronate 2507 copolymer
     acid-isophthalic acid-2-methyl-1,3-propanediol-1,4-
     cyclohexanedimethanol-Coronate 2507 copolymer
                                                     200205-74-9P,
     Phthalic acid-isophthalic acid-trimellitic acid-2-methyl-1,3-
     propanediol-1,3-propanediol-3-methyl-1,5-pentanediol-Coronate 2507
                 200205-75-0P, Phthalic acid-isophthalic
     copolymer
     acid-trimellitic acid-neopentyl glycol-1,6-hexanediol-Coronate
                      200205-76-1P, Terephthalic acid-isophthalic
     2507 copolymer
     acid-trimellitic acid-1,3-propanediol-1,5-pentanediol-Coronate
                      200205-77-2P, Terephthalic acid-isophthalic
     2507 copolymer
     acid-trimellitic acid-2-methyl-1,3-propanediol-3-methyl-1,5-
     pentanediol-Coronate 2507 copolymer
                                           200205-78-3P, Epikote
     828-terephthalic acid-isophthalic acid-sebacic acid-trimellitic
     acid-ethylene glycol-neopentyl glycol copolymer
        (high-build polyester coating compns. with good
        processability and weather and chemical resistance for metals)
     84-72-0, Ethyl phthalyl ethyl glycolate
IT
        (high-build polyester coating compns. with good
        processability and weather and chemical resistance for metals)
L80 ANSWER 18 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN
                         1997:314857 HCAPLUS
ACCESSION NUMBER:
                         126:294653
DOCUMENT NUMBER:
                         Antifogging compositions containing
TITLE:
                         UV-absorbed monomer and silica sol
                         Oonishi, Shunichi; Momohira, Satoru
INVENTOR(S):
                         Mitsubishi Kagaku MKV, Japan
PATENT ASSIGNEE(S):
                         Jpn. Kokai Tokkyo Koho, 10 pp.
SOURCE:
                         CODEN: JKXXAF
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         Japanese
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                                                    DATE
                                            APPLICATION NO.
     PATENT NO.
                         KIND
                                DATE
```

JP 09059603	A2	19970304	JP 1995-210603	1995 0818
JP 2998604 PRIORITY APPLN. INFO.:	В2	20000111	< JP 1995-210603	1995

0818

Title composition comprises (A) UV-absorber or/and AΒ light-stable group-containing acrylic resin aqueous emulsion, and (B) inorg. colloid sol with 0.5-4 B/A solid weight ratio. Thus, an acrylic resin emulsion was prepared from Me methacrylate 50, Et acrylate 30, 2-hydroxyethyl methacrylate 19, and

2-hydroxy-4-methacryloyloxybenzophenone and used with colloidal silica in 3:1 water-ethanol for applying on a poly(ethylene terephthalate) film, showing good adhesion and fogging resistance.

189060-61-5P IT

(antifogging compns. containing UV-absorbed monomer and silica sol)

189060-61-5 HCAPLUS RN

1-Aziridinepropanoic acid, 2-[[3-(1-aziridinyl)-1-CN oxopropoxy]methyl]-2-ethyl-1,3-propanediyl ester, polymer with

4-benzoyl-3-hydroxyphenyl 2-methyl-2-propenoate, ethyl

2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and methyl

2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 52234-82-9 CMF C21 H35 N3 O6

CM 2

2035-72-5 CRN C17 H14 O4 CMF

$$\begin{array}{c|c} OH & O\\ H_2C & O\\ \hline \\ Me-C-C-O \end{array}$$

```
CM
      3
```

CRN 868-77-9 CMF C6 H10 O3

CM 4

CRN 140-88-5 CMF C5 H8 O2

CM 5

CRN 80-62-6 CMF C5 H8 O2

$$H_2C$$
 O \parallel \parallel \parallel $Me-C-C-OMe$

ICM C09K003-18 IC

ICS C08K003-00; C08L033-06; C09K003-00; C09K015-30

42-7 (Coatings, Inks, and Related Products) CC

acrylic resin antifogging compn emulsion; silica sol UV stacrylic resin antifogging

Antifogging agents IT

(coatings; antifogging compns. containing UV-absorbed monomer and silica sols)

IT 189060-61-5P 189060-62-6P

(antifogging compns. containing UV-absorbed monomer and silica sol)

25038-59-9P, Poly(ethylene terephthalate), uses IT

(film; antifogging compns. containing UV-absorbed monomer and silica sol)

L80 ANSWER 19 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1997:12596 HCAPLUS

DOCUMENT NUMBER:

126:48423

TITLE:

Aqueous compositions

containing acetoacetate functional polymer and

multifunctional amine

INVENTOR (S):

Sugiyama, Takayuki; Shibata, Tomohiro

Rohm and Haas Company, USA PATENT ASSIGNEE(S):

SOURCE:

Eur. Pat. Appl., 9 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 744450	A2		EP 1996-303341	1996 0513
			<	
EP 744450 R: DE, DK, FR,		19981230 C, NL		
JP 08311407	A2	19961126	JP 1995-148413	1995 0524
CA 2174916	AA	19961025	< CA 1996-2174916	1996 0424
CN 1144242	A	19970305	< CN 1996-108027	1996 0424
BR 9602041	А	19981006	< BR 1996-2041	1996
NO 9601832	A	19961125	< NO 1996-1832	0424 1996 0507
AU 9652199	A1	19961205	< AU 1996-52199	1996 0510
PRIORITY APPLN. INFO.:			< JP 1995-148413	A 1995
			<	0524

AB Aqueous coating compns. that offer excellent film
forming properties, solvent resistance, especially resistance to
H2O and alkalis, and tight adhesion are made from a composition containing
acetoacetate functional polymers having acetoacetate functional
groups and acid functional groups, and having a weight-average mol. weight
(Mw) ≥100,000, and multifunctional amine. Thus,
(NH4)2S2O8-initiated emulsion polymerization of 2-ethylhexyl
acrylate, styrene, Me
methacrylate, acetoacetoxyethyl methacrylate, and
methacrylic acid and crosslinking with aqueous
1.6-boxyredigmine solution gave a polymer emulsion baying Mw 837 000

methacrylic acid and crosslinking with aqueous 1,6-hexanediamine solution gave a polymer emulsion having Mw 837,000 and evaluated in a paint composition to show good EtOH and xylene solvent resistance.

IT 184868-01-7P

(aqueous compns. containing acetoacetate functional polymer and multifunctional amine crosslinker for solvent resistant paint)

RN 184868-01-7 HCAPLUS

CN Butanoic acid, 3-oxo-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl

Page 62

ester, polymer with ethenylbenzene, 2-ethylhexyl 2-propenoate, 1,6-hexanediamine, methyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 21282-97-3 CMF C10 H14 O5

CM 2

CRN 124-09-4 CMF C6 H16 N2

$$H_2N-(CH_2)_6-NH_2$$

CM 3

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{CH}_2-\text{O-C-CH} == \text{CH}_2 \\ \parallel \\ \text{Et-CH-Bu-n} \end{array}$$

CM 4

CRN 100-42-5 CMF C8 H8

$$H_2C = CH - Ph$$

CM 5

CRN 80-62-6 CMF C5 H8 O2

```
CM 6
```

CRN 79-41-4 CMF C4 H6 O2

```
CH<sub>2</sub>
||
Me- C- CO<sub>2</sub>H
```

IC ICM C09D133-14 ICS C09D005-02

CC 42-7 (Coatings, Inks, and Related Products)

IT 184868-01-7P

(aqueous compns. containing acetoacetate functional polymer and multifunctional amine crosslinker for solvent resistant paint)

L80 ANSWER 20 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1996:534630 HCAPLUS

DOCUMENT NUMBER:

125:171004

TITLE:

Antifogging aqueous

compositions

INVENTOR (S):

Momohira, Satoru; Kinoshita, Kazuya; Fujiwara,

Katsuhiro; Oohayashi, Atsushi Mitsubishi KagakuMKV, Japan

PATENT ASSIGNEE(S): SOURCE:

Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
TD 00151567	A2	19960611	JР 1994-295079	
JP 08151567	AZ	19900011	UF 1994 293079	1994 1129
PRIORITY APPLN. INFO.:			< JP 1994-295079	
PRIORITI APPLN. INFO.:			01 1001 20000	1994 1129
			_	

AB Title compns. contain 0.4-7.0:1 inorg. colloidal sols and resins (from 1-50:50-99 hydrolyzable silyl-containing unsatd. compds. and α,β-ethyleneic unsatd. compds.) in aqueous media or water. An aqueous composition containing alumina sol, Bu acrylate-N,N-dimethylaminoethyl methacrylate-2-hydroxyethyl methacrylate-3-methacryloxypropyltrimethoxysilane-Me methacrylate copolymer, and TAZM showed good adhesion to plastic or glass articles and formed films with good transparency and antifogging initially and after 1 yr.

IT 180592-46-5P 180592-47-6P

(colloidal inorg. sol-containing aqueous acrylic siloxanes as antifogging/transparent coatings)

RN 180592-46-5 HCAPLUS

2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with N-(2-aminoethyl)-N'-[2-[(2-aminoethyl)amino]ethyl]-1,2-ethanediamine, butyl 2-propenoate, (chloromethyl)oxirane, 2-hydroxyethyl 2-methyl-2-propenoate, 4,4'-(1-methylethylidene)bis[phenol], methyl 2-methyl-2-propenoate and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 2867-47-2 CMF C8 H15 N O2

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ & || & || \\ \text{Me}_2 \text{N-CH}_2 - \text{CH}_2 - \text{O-C-C-Me} \end{array}$$

CM 2

CRN 2530-85-0 CMF C10 H20 O5 Si

CM 3

CRN 868-77-9 CMF C6 H10 O3

CM 4

CRN 141-32-2 CMF C7 H12 O2

CM 5

CRN 112-57-2 CMF C8 H23 N5

CM 6

CRN 106-89-8 CMF C3 H5 Cl O

CM 7

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{c|c} ^{H_2C} & \text{O} \\ & \parallel & \parallel \\ \text{Me-} & \text{C-} & \text{C-} & \text{OMe} \end{array}$$

CM 8

CRN 80-05-7 CMF C15 H16 O2

RN 180592-47-6 HCAPLUS
2-Propenoic acid, 2-methyl-, butyl ester, polymer with
N-(2-aminoethyl)-N'-[2-[(2-aminoethyl)amino]ethyl]-1,2ethanediamine, (chloromethyl)oxirane, 2-(dimethylamino)ethyl
2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate,
4,4'-(1-methylethylidene)bis[phenol], methyl 2-methyl-2-propenoate
and 3-[tris(2-methoxyethoxy)silyl]propyl 2-methyl-2-propenoate
(9CI) (CA INDEX NAME)

CM 1

CRN 57069-48-4 CMF C16 H32 O8 Si

CRN 2867-47-2 CMF C8 H15 N O2

CM 3

CRN 868-77-9 CMF C6 H10 O3

CM 4

CRN 112-57-2 CMF C8 H23 N5

CM 5

CRN 106-89-8 CMF C3 H5 C1 O

CM 6

CRN 97-88-1 CMF C8 H14 O2

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{n-BuO-C-C-Me} \end{array}$$

CRN 80-62-6 CMF C5 H8 O2

8 CM

CRN 80-05-7 CMF C15 H16 O2

ICM C09K003-18 IC

ICS C08K003-22; C08K003-30; C08L033-00; C08L035-00; C08L041-00

42-7 (Coatings, Inks, and Related Products) CC

95627-27-3P 95627-28-4P 180592-46-5P IT

180592-47-6P

(colloidal inorg. sol-containing aqueous acrylic siloxanes as antifogging/transparent coatings)

L80 ANSWER 21 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1996:170935 HCAPLUS

DOCUMENT NUMBER:

124:204840

TITLE:

Magnetic powder-coated fishing lines for electrically measuring reel unwinding

length with improved precision

Mizuno, Takeya; Oohira, Seiichi Kureha Chemical Ind Co Ltd, Japan

PATENT ASSIGNEE(S):

Jpn. Kokai Tokkyo Koho, 10 pp.

SOURCE: CODEN: JKXXAF

DOCUMENT TYPE:

INVENTOR(S):

Patent Japanese

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08000141	A2	19960109	JP 1994-162803	1994 0621

PRIORITY APPLN. INFO.:

JP 1994-162803

1994 0621

< - -

<--

The title fishing lines are prepared by coating yarns with compns. containing 1:0.025-0.25 (weight ratio) mixts. of (meth)acrylic acid polymers and ethylenimine derivs., polyamides, or vinylidene chloride polymers as binders and magnetic powders. Polyethylene fibers were coated with a composition containing (dimethylamino)ethyl methacrylate-methacrylic acid copolymer 30.0, ethylenimine-1,6-hexanediol hydroxyadipate-hexamethylene diisocyanate copolymer 2.5, and Ni compound magnetic powder 1.5% to give magnetic powder-coated fibers with abrasion resistance rating (5 best, 1 worst) 5.

IT 174530-74-6, Ethylenimine-1,6-hexanediol-hexamethylene diisocyanate copolymer

((meth)acrylate polymer binder containing; for coating fishing lines with magnetic powders for elec. measuring reel unwinding length)

RN 174530-74-6 HCAPLUS CN 1,6-Hexanediol, polymer with aziridine and 1,6-diisocyanatohexane (9CI) (CA INDEX NAME)

CM 1

CRN 822-06-0 CMF C8 H12 N2 O2

OCN-(CH₂)₆-NCO

CM 2

CRN 629-11-8 CMF C6 H14 O2

 $_{\rm HO^-}$ (CH₂)₆-OH

CM 3

CRN 151-56-4 CMF C2 H5 N



IC ICM A01K091-00 ICS D06M011-00

CC 40-5 (Textiles and Fibers)

ST magnetic powder coated fishing line; urethane polymer

```
coated fishing line; polyethylene fishing line magnetic
     powder coated; polyamide coated fishing line;
    vinylidene chloride polymer coated
     fishing line
IT
     Urethane polymers, uses
        ((meth)acrylate binders containing; for coating
        fishing lines with magnetic powders for elec. measuring reel
        unwinding length)
     Polyamides, uses
IT
        (binders; for coating fishing lines with magnetic
        powders for elec. measuring reel unwinding length)
     Abrasion-resistant materials
IT
        (magnetic powder-coated fishing lines for elec.
        measuring reel unwinding length)
     Synthetic fibers, polymeric
IT
        (magnetic powder-coated fishing lines for elec.
        measuring reel unwinding length with improved precision)
     Polyolefin fibers
IT
        (ethylene, magnetic powder-coated fishing
        lines for elec. measuring reel unwinding length with improved
        precision)
IT
     Sporting goods
        (fishing lines, magnetic powder-coated yarns for
        elec. measuring reel unwinding length with improved precision
     174530-74-6, Ethylenimine-1,6-hexanediol-hexamethylene
IT
     diisocyanate copolymer
        ((meth)acrylate polymer binder containing; for
        coating fishing lines with magnetic powders for elec.
        measuring reel unwinding length)
     28675-43-6, (Dimethylamino) ethyl methacrylate-methacrylic
IT
                      120016-07-1, 2-(3',5'-Di-tert-butyl-2'-
     acid copolymer
     hydroxyphenyl)-5-acryloylaminobenzotriazole-(diethylamino)
     ethyl acrylate copolymer
                                174530-70-2
     174530-71-3, (Dimethylamino) propyl methacrylate-
     methacrylic acid copolymer
                                  174530-72-4,
     (Dimethylamino) butyl methacrylate-methacrylic
                      174530-73-5, 2-[3',5'-Bis(\alpha,
     acid copolymer
     \alpha-dimethylbenzyl)-2'-hydroxyphenyl]-5-
     methacryloylaminobenzotriazole-(dimethylamino)ethyl methacrylate
     copolymer
        (binder, containing ethyleneurea compds.; for coating
        fishing lines with magnetic powders for elec. measuring reel
        unwinding length)
     25191-90-6, CM 8000
                            170448-40-5, DO 600K
IT
        (binder; for coating fishing lines with magnetic
        powders for elec. measuring reel unwinding length)
     9002-88-4, Polyethylene
IT
         (fiber; magnetic powder-coated fishing lines for
        elec. measuring reel unwinding length with improved precision)
L80 ANSWER 22 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN
                          1995:506258 HCAPLUS
ACCESSION NUMBER:
                          122:242470
DOCUMENT NUMBER:
                          Film laminates with uniform primer layers
TITLE:
                          Yagi, Hisanori; Fujimoto, Natsuko
INVENTOR(S):
                          Shinoji Seishi Kk, Japan
PATENT ASSIGNEE(S):
                          Jpn. Kokai Tokkyo Koho, 6 pp.
SOURCE:
                          CODEN: JKXXAF
                          Patent
DOCUMENT TYPE:
```

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06340755	A2	19941213	JP 1993-129726	1993 0531
JP 3319036 PRIORITY APPLN. INFO.:	В2	20020826	< JP 1993-129726	1993 0531

<--

AB Title laminates, useful in manufacturing thermal-transfer media or magnetic tapes, contain primers containing polyethylenimine, aqueous resins, and cellulose or starch adhesives. A polypropylene film was coated with an aqueous composition containing Epomin P 1000, butadiene-styrene copolymer, and Me cellulose to form a film with smooth surface and good blocking resistance.

IT 9002-98-6, Epomin P 1000

(Epomin P 100; polyethylenimine- and cellulose (or starch)-containing aqueous primers on plastics for blocking-resistant and smooth surfaces)

RN 9002-98-6 HCAPLUS

CN Aziridine, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 151-56-4 CMF C2 H5 N



IC ICM C08J007-04 ICS B32B027-00

CC 42-10 (Coatings, Inks, and Related Products) Section cross-reference(s): 38, 74, 77

IT 9002-98-6, Epomin P 1000

(Epomin P 100; polyethylenimine- and cellulose (or starch)-containing aqueous primers on plastics for blocking-resistant and smooth surfaces)

IT 9003-55-8, Butadiene-styrene copolymer 9004-32-4 9004-67-5, Methyl cellulose 9005-25-8D, Starch, oxidized 25767-47-9, Butyl acrylate-styrene copolymer

(polyethylenimine- and cellulose (or starch)-containing aqueous primers on plastics for blocking-resistant and smooth surfaces)

L80 ANSWER 23 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1995:304894 HCAPLUS

DOCUMENT NUMBER: 122:83221

TITLE: Blends of polyurethane dispersions with latex

emulsions for bookbinding

INVENTOR(S): Mehta, Ramish; Fresonke, Flavia M.

PATENT ASSIGNEE(S): H. B. Fuller Licensing and Financing, Inc.,

USA

SOURCE: PCT Int. Appl., 39 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	NT NO.	KIND	DATE	APPLICATION NO.	DATE
	405738			WO 1992-EP2943	1993
				< HU, JP, KP, KR, LK, MG,	0119 MN,
	MW, NO, NZ, RW: AT, BE, CH, PT, SE, BF,	DE, DK BJ, CF	, ES, FR, , CG, CI,		NL,
US 5	443674	Α	19950822	US 1992-938872	1992 0831
EP 6	56926	A1	19950614	< EP 1993-902116	1993
	56926		20000322	<	0119
	R: AT, BE, CH, NL, PT, SE	DE, DK		GB, GR, IE, IT, LI, LU, AU 1994-57001	MC,
				<	1993 0119
	457001 140938	A1 C		CA 1993-2140938	1993
TD 1	.0513407	Т2	19981222	< JP 1993-506769	0119
OP 1	,046160	12	13301222	<	1993 0119
AT 1	.90994	E	20000415		1993 0119
PRIORITY	APPLN. INFO.:			< US 1992-938872	A
				<	1992 0831
				WO 1992-EP2943	W 1993 0119
				<	

AB A method of binding a book block having a spine area to form a book comprises applying an aqueous composition containing

an aqueous vehicle; .apprx.1-90% a film-forming resin (e.g., EVA, butadiene-styrene rubber); and .apprx.10-99% a polyurethane resin dispersion or emulsion to the spine area of a book block, and removing the volatile components of the composition 160342-98-3P

(blends of polyurethane dispersions with latex emulsions for bookbinding)

160342-98-3 HCAPLUS

RN Hexanedioic acid, polymer with N-(2-aminoethyl)-1,2-ethanediamine, CN 1,3-bis(1-isocyanato-1-methylethyl)benzene, 1,4-butanediol and 3-hydroxy-2-(hydroxymethyl)-2-methylpropanoic acid (9CI) (CA INDEX NAME)

CM 1

IT

CRN 4767-03-7 CMF C5 H10 O4

CM 2

CRN 2778-42-9 C14 H16 N2 O2 CMF

CM 3

CRN 124-04-9 CMF C6 H10 O4

 $HO_2C-(CH_2)_4-CO_2H$

CM

CRN 111-40-0 CMF C4 H13 N3

 $_{\rm H_2N-CH_2-CH_2-NH-CH_2-CH_2-NH_2}$

```
CM
```

CRN 110-63-4 CMF C4 H10 O2

 $_{\rm HO}-$ (CH₂)₄-OH

C09J175-06 IC

38-3 (Plastics Fabrication and Uses) CC

160342-98-3P IT

(blends of polyurethane dispersions with latex emulsions for bookbinding)

L80 ANSWER 24 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

1995:19837 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

122:12198

Cathodic electrodeposition coatings with TITLE: improved throwing power and their preparation

Chung, Ding Y.; Kirshenbaum, Kenneth S. INVENTOR(S): du Pont de Nemours, E. I., and Co., USA PATENT ASSIGNEE(S):

U.S., 6 pp. SOURCE: CODEN: USXXAM

Patent DOCUMENT TYPE: English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5314594	A	19940524	US 1992-988436	1992 1209
PRIORITY APPLN. INFO.:			< US 1992-988436	1992 1209

The aqueous coating compns. contain epoxy-amine adducts as AB binders, blocked polyisocyanate crosslinkers, and alkyl thio esters or polymeric products of epoxy resins, polyalkylene glycols, and sugars. An aqueous compn . containing lactic acid, blocked PAPI, a reaction product of Epon 828, Synfac 8009, bisphenol A (I), diethylenetriamine, and methylethanolamine, and a pigment paste containing I, Epon 828, blocked TDI, a quaternizing agent, and distearyl thiodipropionate (II) was electrodeposited at 32° to form films with a thickness of 1.33 ± 0.03 mils and showing total and edge throwing power of 12.3 in and 7.1 in, resp., vs. 11.4 and 6.8, resp., without the II.

159632-72-1 159632-74-3 IT

(electrodeposition coatings, containing alkyl thio esters or epoxy-polyoxyalkylene-sugar adducts, with high throwing power)

159632-72-1 HCAPLUS RN

Phenol, 4,4'-(1-methylethylidene)bis-, polymer with CN

N-(2-aminoethyl)-1,2-ethanediamine, (chloromethyl)oxirane, 1,3-diisocyanatomethylbenzene, 2-(methylamino)ethanol and α,α' -[(1-methylethylidene)di-4,1-phenylene]bis[ω -hydroxypoly(oxy-1,2-ethanediyl)], 2-hydroxypropanoate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 50-21-5 CMF C3 H6 O3

CM 2

CRN 159632-71-0 CMF (C15 H16 O2 . C9 H6 N2 O2 . C4 H13 N3 . C3 H9 N O . C3 H5 C1 O . (C2 H4 O)n (C2 H4 O)n C15 H16 O2)x

CCI PMS

CM 3

CRN 32492-61-8 CMF (C2 H4 O)n (C2 H4 O)n C15 H16 O2 CCI PMS

HO
$$CH_2-CH_2-O$$
 Me Me Me Me

CM 4

CRN 26471-62-5 CMF C9 H6 N2 O2 CCI IDS

D1-Me

111-40-0 CRN C4 H13 N3 CMF

 $_{\rm H_2N-CH_2-CH_2-NH-CH_2-CH_2-NH_2}$

CM 6

CRN 109-83-1 CMF C3 H9 N O

 $_{\rm HO-CH_2-CH_2-NH-CH_3}$

CM 7

CRN 106-89-8 CMF C3 H5 Cl O

8 CM

CRN 80-05-7 CMF C15 H16 O2

159632-74-3 HCAPLUS RN

Isocyanic acid, polymethylenepolyphenylene ester, polymer with CNN-(2-aminoethyl)-1,2-ethanediamine, (chloromethyl)oxirane, 2-(methylamino)ethanol, 4,4'-(1-methylethylidene)bis[phenol] and α,α' -[(1-methylethylidene)di-4,1-phenylene]bis[ω hydroxypoly(oxy-1,2-ethanediyl)], 2-hydroxypropanoate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 50-21-5 CMF C3 H6 O3

159632-73-2 CRN

(C15 H16 O2 . C4 H13 N3 . C3 H9 N O . C3 H5 Cl O . (C2 H4 O) nCMF (C2 H4 O)n C15 H16 O2 . Unspecified)x

CCI PMS

> CM 3

CRN 32492-61-8

(C2 H4 O)n (C2 H4 O)n C15 H16 O2 CMF

CCI PMS

HO
$$CH_2-CH_2-O$$
 Me Me Me Me

CM

CRN 9016-87-9 Unspecified CMF

PMS, MAN CCI

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

5 CM

CRN 111-40-0 CMF C4 H13 N3

 $_{\rm H_2N-CH_2-CH_2-NH-CH_2-CH_2-NH_2}$

6 CM

CRN 109-83-1 CMF C3 H9 N O

 $_{\rm HO-\,CH_2-\,CH_2-\,NH-\,CH_3}$

CM 7 CRN 106-89-8 CMF C3 H5 Cl O

CM 8

CRN 80-05-7 CMF C15 H16 O2

IC ICM C25D013-10

INCL 204181400

IT

CC 42-9 (Coatings, Inks, and Related Products)

throwing power **epoxy** electrodeposition coating; alkyl thioester **epoxy** coating throwing power; sugar polyoxyalkylene **epoxy** adduct additive coating

IT Epoxy resins, uses

(amine adducts, electrodeposition coatings containing, with alkyl thio esters or **epoxy**-polyoxyalkylene-sugar adducts for high throwing power)

Electrodeposits and Electroplates

(cationic, epoxy-amine adduct coatings, containing throwing power improvers)

IT Epoxy resins, uses

(reaction products, with polyoxyalkylenes and sugars, as throwing power improvers for **epoxy** resin electrodeposition coatings)

IT 159632-72-1 159632-74-3

(electrodeposition coatings, containing alkyl thio esters or epoxy-polyoxyalkylene-sugar adducts, with high throwing power)

123-28-4, Dilauryl thiodipropionate 693-36-7, Distearyl thiodipropionate 25322-68-3D, reaction products with Epon 828 and sorbitol 160162-64-1 (throwing power improver, cationic epoxy-amine adduct

coatings containing)
L80 ANSWER 25 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1994:220505 HCAPLUS

DOCUMENT NUMBER:

120:220505

TITLE:

Amine-modified acrylic polymer-containing epoxy resin cathodic electrodeposition

paints

INVENTOR(S):

Tanimoto, Motoi; Yoshida, Tatsuo; Tobinaga,

Kenshiro; Toyoda, Yuji

PATENT ASSIGNEE(S):

Nippon Paint Co., Ltd., Japan

SOURCE:

Eur. Pat. Appl., 8 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 566096	A1	19931020	EP 1993-106079	1993 0414
			<	
EP 566096 R: DE, FR, GB	B1	19950802		
JP 05287223	A2	19931102	JP 1992-120110	1992
				0414
			<	
us 5360839	Α	19941101	US 1993-45431	
08 330000				1993
				0413
			<	
PRIORITY APPLN. INFO.:			JP 1992-120110 P	=
				1992
				0414
			/	

The title paints, giving films with no oil droplet-induced AB craters, contain aqueous dispersions of primary filmforming resins and 1-30% resins prepared from secondary amines and acrylic polymers which have number-average mol. weight 1000-20,000 and are prepared with sufficient tert-Bu (meth) acrylates to give glass temperature ≥50°, OH-containing monomers to give OH number ≥40, and epoxide monomers to give epoxide number 0.5-2.5 mmol/g. An aqueous composition contained 2-ethylhexanol-blocked TDI, diethylenetriamine-Epikote 1001-Tone 0200 copolymer, and N-methylethanolamine-modified 8.6:64.1:15:12.3 iso-Bu acrylate-tert-Bu methacrylate-glycidyl methacrylate-2-hydroxyethyl methacrylate copolymer AcOH salt. 154077-15-3 IT

(cathodic electrodeposition paints containing, for films without oil droplet-induced craters)

RN 154077-15-3 HCAPLUS

Phenol, 4,4'-(1-methylethylidene)bis-, polymer with N-(2-aminoethyl)-1,2-ethanediamine, (chloromethyl)oxirane, 1,3-diisocyanatomethylbenzene and α,α' -(oxydi-2,1-ethanediyl)bis[ω -hydroxypoly[oxy(1-oxo-1,6-hexanediyl)]] (9CI) (CA INDEX NAME)

CM 1

CN

CRN 50327-24-7

CMF (C6 H10 O2)n (C6 H10 O2)n C4 H10 O3

CCI PMS

PAGE 1-B

$$- (CH2)5 - OH$$

CM 2

CRN 26471-62-5 CMF C9 H6 N2 O2 CCI IDS

D1-Me

CM 3

CRN 111-40-0 CMF C4 H13 N3

 $_{\rm H_2N^-\,CH_2^-\,CH_2^-\,NH^-\,CH_2^-\,CH_2^-\,NH_2}$

CM 4

CRN 106-89-8 CMF C3 H5 Cl O

CM 5

CRN 80-05-7 CMF C15 H16 O2

ICM C09D005-44 IC

42-10 (Coatings, Inks, and Related Products) CC

cathodic epoxy electrodeposition pinhole free; amine ST

acrylic epoxy cathodic coating

Electrodeposits and Electroplates IT

(aqueous, cathodic, **epoxy** resin-based, containing amine-modified acrylic polymers, for films without oil

droplet-induced craters)

Epoxy resins, miscellaneous ΙT

(cathodic electrodeposition paints, containing amine-modified acrylic polymers, for films without oil droplet-induced craters)

154077-15-3 IT

(cathodic electrodeposition paints containing, for films without oil droplet-induced craters)

64-19-7D, Acetic acid, salts with reaction products of IT methylethanolamine and glycidyl- and hydroxy-containing (meth) acrylate polymers and polyisocyanates 109-83-1D, N-Methylethanolamine, reaction products with glycidyl- and hydroxy-containing (meth)acrylate polymers and/or polyisocyanates, acetate salt 4098-71-9D, Isophoronediisocyanate, polymers with methylethanolamine-modified glycidyl- and hydroxy-containing (meth) acrylate polymers, 26471-62-5D, TDI, polymers with acetate salt methylethanolamine-modified glycidyl- and hydroxy-containing (meth) 154077-16-4D, reaction acrylate polymers, acetate salt products with methylethanolamine, acetate salt 154077-17-5D, reaction products with methylethanolamine, acetate salt 154077-18-6D, reaction products with methylethanolamine, acetate salt

(epoxy-based electrodeposition paints containing, for films without oil droplet-induced craters)

L80 ANSWER 26 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

1992:450889 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

117:50889

TITLE:

Process and aqueous compositions for applying coatings containing polyurethanes and acrylic polymers

Mitsuji, Masaru; Endo, Mitsugu; Kajima,

Junichi; Takaya, Yasuo

PATENT ASSIGNEE(S):

Kansai Paint Co., Ltd., Japan

SOURCE:

Ger. Offen., 17 pp. CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

INVENTOR(S):

German

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4127680	A1	19920227	DE 1991-4127680	1991 0821
JP 04103680	A2	19920406	< JP 1990-222015	1990 0822
			<	
JP 3094109 GB 2247683	B2 A1	20001003 19920311	GB 1991-17732	1991
			<	0816
GB 2247683	B2	19940202 19930713	US 1991-747837	
US 5227422	Α	19930/13	03 1991-147037	1991 0821
			<	
US 5281655	A	19940125	US 1992-916686	1992 0722
			<	_
PRIORITY APPLN. INFO.:			JP 1990-222015	A 1990 0822
			<	
			US 1991-747837	A3 1991 0821
			<	

Thermosetting coatings with good phys. properties are AB manufactured from high-solids compns. containing water-thinnable acrylic polymers, a crosslinker, and an aqueous dispersion of a polyurethane prepared from aliphatic/alicyclic polyisocyanates, high-mol.-weight polyols, an α , α -dimethylol acid, and optionally, a chain-extender or chain terminator, with the carboxy group being neutralized by a primary and (or) secondary monoamine. Thus, a composition containing 20% solids aqueous 16:2:83:8:15:4:40:32 (weight ratio) acrylic acid -allyl methacrylate-Bu acrylate-hydroxyethyl acrylate-hydroxypropyl methacrylate- γ methacryloyloxypropyltrimethoxysilane-Me methacrylate-styrene copolymer diethanolamine (I) salt emulsion 80, 31.6% aqueous 12.2:10:78.6:88.2:88.2:4.8 (weight ratio) 1,4-butanediol- α , α dimethylolpropionic acid-IPDI-polycaprolactonediol-poly(3methylpentanediol adipate)diol-trimethylolpropane copolymer I salt emulsion 17, U-Van 28SE emulsion 20, and an Al pigment concentrate 15 parts was applied to a an electrophoretically primed steel sheet, dried 10 min at 80°, overcoated with a transparent acrylic layer, heated 30 min at 120-140°, and topcoated with a sealing layer to give a coating with better phys. properties than a similar coating using Et3N instead of I for the neutralization of the polyester-polyurethane. TΤ 141954-62-3P (manufacture of, for thermosetting waterborne coatings

containing acrylic polymer salts)
141954-62-3 HCAPLUS

1,3-Benzenedicarboxylic acid, polymer with 2-[(2-aminoethyl)amino]ethanol, 2,2-dimethyl-1,3-propanediol, 1,2-ethanediol, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol, hexanedioic acid, 3-hydroxy-2-(hydroxymethyl)-2-methylpropanoic acid, 1,1'-methylenebis[4-isocyanatobenzene] and α,α' -[(1-methylethylidene)di-4,1-phenylene]bis[ω -hydroxypoly(oxy-1,2-ethanediyl)], compd. with 2,2'-iminobis[ethanol] (9CI) (CA INDEX NAME)

CM 1

RN

CN

CRN 111-42-2 CMF C4 H11 N O2

 $_{\rm HO-CH_2-CH_2-NH-CH_2-CH_2-OH}$

CM 2

CRN 141954-61-2
CMF (C15 H22 N2 O2 . C8 H6 O4 . C6 H14 O3 . C6 H10 O4 . C5 H12 O2 . C5 H10 O4 . C4 H12 N2 O . C2 H6 O2 . (C2 H4 O)n (C2 H4 O)n C15 H16 O2)x

CCI PMS

CM 3

CRN 32492-61-8 CMF (C2 H4 O)n (C2 H4 O)n C15 H16 O2 CCI PMS

HO
$$CH_2-CH_2-O$$
 Me Me Me Me Me

CM 4

CRN 5124-30-1 CMF C15 H22 N2 O2

CRN 4767-03-7 CMF C5 H10 O4

$$\begin{array}{c} \text{Me} \\ | \\ \text{HO-CH}_2\text{--C-CO}_2\text{H} \\ | \\ \text{CH}_2\text{--OH} \end{array}$$

CM 6

CRN 126-30-7 CMF C5 H12 O2

$$\begin{array}{c} & \text{Me} \\ | \\ \text{HO-} \ \text{CH}_2\text{--} \ \text{C--} \ \text{CH}_2\text{--} \ \text{OH} \\ | \\ & \text{Me} \end{array}$$

CM 7

CRN 124-04-9 CMF C6 H10 O4

$$_{{
m HO_2C^-}}$$
 (CH₂) $_{4}-{
m CO_2H}$

CM 8

CRN 121-91-5 CMF C8 H6 O4

CM 9

CRN 111-41-1 CMF C4 H12 N2 O

$$_{\rm H_2N^-\,CH_2^-\,CH_2^-\,NH^-\,CH_2^-\,CH_2^-\,OH}$$

```
CM 10
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CRN 107-21-1 CMF C2 H6 O2

 $_{\rm HO}-_{\rm CH_2}-_{\rm CH_2}-_{\rm OH}$

CM 11

CRN 77-99-6 CMF C6 H14 O3

$$_{
m HO-CH_2-C-Et}^{
m CH_2-OH}$$

ICM C09D175-04 IC ICS C09D133-02; C09D161-28; C08G018-34; B05D001-04; B05D001-36 ICA C09D005-02; C09D007-12 42-10 (Coatings, Inks, and Related Products) thermosetting waterborne acrylic polyurethane coating; ST diethanolamine polyurethane salt coating; methacryloyloxysilane copolymer salt waterborne coating; styrene acrylic waterborne thermosetting coating ; methacrylate copolymer waterborne thermosetting coating ; acrylate copolymer waterborne thermosetting coating; hydroxypropyl methacrylate copolymer waterborne coating; hydroxyethyl acrylate copolymer waterborne coating; caprolactone polyester polyurethane waterborne coating; methylpentanediol polyester polyurethane waterborne coating; dimethylolpropionic polyester polyurethane waterborne coating; IPDI polyester polyurethane waterborne coating; butanediol polyester polyurethane waterborne coating; adipate polyester polyurethane waterborne coating; trimethylolpropane polyester polyurethane

waterborne coating
IT Urethane polymers, compounds

(polyester-, block, salts, coatings, thermosetting waterborne, containing acrylic polymer salts)

IT Urethane polymers, compounds

thane polymers, compounds (polyester-polyurea-, block, salts, **coatings**,

thermosetting waterborne, containing acrylic polymer salts)

IT Coating materials

(thermosetting, water-thinned, containing polyurethane salts and acrylic polymer salts)

IT 142441-33-6P 142441-34-7P 142441-35-8P

(manufacture of, as thermosetting waterborne coatings)
IT 77-99-6DP, block polyester-polyurethanes, salts 110-63-4DP,
1,4-Butanediol, block polyester-polyurethanes, salts 111-41-1DP,
block polyester-polyurea-polyurethane, salts 111-42-2DP, salts
with carboxy group-containing block polyester-polyurethanes

```
ACQUAH 09/613,425
    124-04-9DP, Hexanedioic acid, block polyester-polyurethanes, salts
    502-44-3DP, Caprolactone, block polyester-polyurethanes, salts
    901-44-0DP, block polyester-polyurea-polyurethane, salts
                 4457-71-0DP, 3-Methyl-1,5-pentanediol, block
    4098-71-9P
    polyester-polyurethanes, salts
                                    4767-03-7DP, α,α-
    Dimethylolpropionic acid, block polyester-polyurethanes, salts
    141954-62-3P
        (manufacture of, for thermosetting waterborne coatings
        containing acrylic polymer salts)
                                                  141954-60-1P
                                   135834-21-8P
                   135803-23-5P
    135802-86-7P
TT
     141974-12-1P
                   142155-42-8P
        (manufacture of, for thermosetting waterborne coatings
        containing polyurethane salts)
L80 ANSWER 27 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN
                         1991:431234 HCAPLUS
ACCESSION NUMBER:
                         115:31234
DOCUMENT NUMBER:
                         Acrylic aqueous coatings
TITLE:
                         Harui, Nobuo; Iwamura, Goro
```

INVENTOR(S):
PATENT ASSIGNEE(S):

Dainippon Ink and Chemicals, Inc., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 7 pp.

SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE:

Patent Japanese

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03021673	A2	19910130	JP 1989-155794	1989 0620
PRIORITY APPLN. INFO.:			< JP 1989-155794	1989 0620

The title coatings with good water resistance contain water-soluble or water-dispersible film-forming polymers and crosslinkers prepared from nonaq. solns. of melamine resins (A) and water-soluble polymers containing A-reactive functional groups. Thus, aqueous composition containing Bu acrylate

-2-hydroxyethyl methacrylate-methacrylic acidMe methacrylate-styrene copolymer (I),
pigment, and a crosslinker prepared from Super-Beckamine L 117-70B and I was spread on a middle composition-coated panel, covered with a clear acrylic composition, and baked at 160° for 20 min to give a film with good smoothness and water resistance.

IT 134685-33-9

CN

(coatings, water-resistant)

RN 134685-33-9 HCAPLUS

1,3-Benzenedicarboxylic acid, polymer with butyl 2-propenoate, 4-cyclohexene-1,2-dicarboxylic acid, 1,3-dihydro-1,3-dioxo-5-isobenzofurancarboxylic acid, 2,2-dimethyl-1,3-propanediol, ethenylbenzene, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol, formaldehyde, 2-hydroxyethyl 2-methyl-2-propenoate, 4,4'-(1-methylethylidene)bis[cyclohexanol], methyl 2-methyl-2-propenoate, \alpha-(2-methyl-1-oxo-2-propenyl)-\alpha-methoxypoly(oxy-1,2-ethanediyl) and 1,3,5-triazine-2,4,6-triamine

(9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0

CMF (C2 H4 O)n C5 H8 O2

CCI PMS

$$H_2C$$
 O \parallel \parallel \parallel \parallel \parallel \parallel OMe $CH_2-CH_2-CH_2-CH_2$

CM 2

CRN 868-77-9 CMF C6 H10 O3

CM 3

CRN 552-30-7 CMF C9 H4 O5

CM 4

CRN 141-32-2 CMF C7 H12 O2

CM 5

CRN 126-30-7 CMF C5 H12 O2

CRN 121-91-5 CMF C8 H6 O4

CM 7

CRN 108-78-1 CMF C3 H6 N6

CM 8

CRN 100-42-5 CMF C8 H8

$$_{\text{H}_2\text{C}}=\text{CH}-\text{Ph}$$

CM 9

CRN 88-98-2 CMF C8 H10 O4

CRN 80-62-6 C5 H8 O2 CMF

$$\begin{array}{c|c} ^{H_2C} & \text{O} \\ \parallel & \parallel \\ \text{Me--} & \text{C---} \text{OMe} \end{array}$$

CM 11

80-04-6 CRN C15 H28 O2 CMF

CM 12

CRN 77-99-6 CMF C6 H14 O3

$$\begin{array}{c} \text{CH}_2-\text{OH} \\ | \\ \text{HO-CH}_2-\text{C-Et} \\ | \\ \text{CH}_2-\text{OH} \end{array}$$

CM 13

CRN 50-00-0 CMF C H2 O

$H_2C = 0$

IT 134685-32-8

(crosslinkers, for acrylic coatings)

134685-32-8 HCAPLUS

RN4-Cyclohexene-1,2-dicarboxylic acid, polymer with CN 1,3-benzenedicarboxylic acid, 1,3-dihydro-1,3-dioxo-5-isobenzofurancarboxylic acid, 2,2-dimethyl-1,3-propanediol, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol, formaldehyde, 4,4'-(1-methylethylidene)bis[cyclohexanol] and 1,3,5-triazine-2,4,6-triamine (9CI) (CA INDEX NAME)

CRN 552-30-7 CMF C9 H4 O5

CM 2

CRN 126-30-7 CMF C5 H12 O2

$$\begin{array}{c} & \text{Me} \\ | \\ \text{HO-CH}_2\text{--C-CH}_2\text{--OH} \\ | \\ \text{Me} \end{array}$$

CM 3

CRN 121-91-5 CMF C8 H6 O4

CM 4

CRN 108-78-1 CMF C3 H6 N6

CM 5

CRN 88-98-2

CMF C8 H10 O4

CM 6

CRN 80-04-6 C15 H28 O2 CMF

7 CM

77-99-6 CRN CMF C6 H14 O3

$$\begin{array}{c} \text{CH}_2-\text{OH} \\ | \\ \text{HO-CH}_2-\text{C-Et} \\ | \\ \text{CH}_2-\text{OH} \end{array}$$

CM 8

CRN 50-00-0 CMF C H2 O

$H_2C = 0$

IC ICM C09D161-32 CC

42-7 (Coatings, Inks, and Related Products)

36179-96-1, Butyl acrylate-2-hydroxyethyl methacrylate-methacrylic acidmethyl methacrylate-styrene 134685-31-7 copolymer

(aqueous coatings, containing modified melamine resin crosslinkers, for water resistance)

IT 114374-62-8 134685-33-9

(coatings, water-resistant)

IT 134685-32-8

(crosslinkers, for acrylic coatings)

L80 ANSWER 28 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

1990:576980 HCAPLUS ACCESSION NUMBER:

113:176980 DOCUMENT NUMBER:

Thermally stable, chemically treated inorganic TITLE:

oxide fibers suitable for high-temperature

polymers

Watkins, Johnson Clifford; Swisher, Robert INVENTOR(S):

Gregory

PPG Industries, Inc., USA PATENT ASSIGNEE(S): Eur. Pat. Appl., 16 pp. SOURCE:

CODEN: EPXXDW

Patent DOCUMENT TYPE: English LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 374593	A1	19900627	EP 1989-122532	1989 1206
			<- -	
R: BE, CH,	DE, ES, FR	g, GB, IT,	LI, NL	
JP 02212341	A2	19900823	JP 1989-315127	1989
				1204
			<	
JP 06049599	B4	19940629		
PRIORITY APPLN. INFO	.:		US 1988-283091 A	1988 1212

The title fibers, e.g., glass fibers, are chemical treated with an AB aqueous composition comprising (a) ≥ 1 film -forming polymers that are essentially free of poly(vinyl acetate) homopolymer and polyacrylic homopolymers and copolymers, (b) ≥ 1 lubricants, (c) organosilane coupling agent present from 0 to an effective amount of the coupling agent, (d) >10 parts alkoxide of a metal selected from Ti and Zr per 100 parts of the film-forming polymer, and up to at least the amount of the effective coupling agent, and (e) a carrier for applying the composition to the fibers. The film-forming polymer is selected from epoxy resins, urethane polymers, and their mixts., either as sep. polymers or copolymers. Polyoxyalkylenes, including polyethylene oxide-polypropylene oxide copolymers, are used as the lubricants. The chemical treated glass fibers are used in reinforcing high-temperature processed polymers and thermally resistant polymers.

79-10-7D, 2-Propenoic acid, esters, polymers IT (reinforcement of, sizes for glass fibers for)

79-10-7 HCAPLUS RN

2-Propenoic acid (9CI) (CA INDEX NAME) CN

```
9002-98-6, Polyethylenimine
IT
        (reinforceming of, sizes for glass fibers for)
     9002-98-6 HCAPLUS
RN
    Aziridine, homopolymer (9CI) (CA INDEX NAME)
CN
    CM
         151-56-4
     CRN
     CMF C2 H5 N
     ICM C03C025-02
TC
     ICS C08J005-08
     57-1 (Ceramics)
CC
     Section cross-reference(s): 38
     glass fiber sizing compn; epoxy resin sizing compn
ST
     fiber; urethane polymer sizing compn fiber; organosilane coupling
     agent sizing compn; lubricant sizing compn fiber; titanium
     alkoxide sizing compn fiber; zirconium alkoxide sizing compn fiber
     Polyesters, uses and miscellaneous
TT
     Urethane polymers, uses and miscellaneous
        (epoxy, sizing compns. containing, for glass fibers, for
        high-temperature polymer reinforcement)
     Amides, compounds
ΙT
     Amines, compounds
        (fatty, alkoxylated, polymers, with polycarboxylic
        acids, sizing compns. containing, for glass fibers, for high-temperature
        polymer reinforcement)
     Carboxylic acids, compounds
IT
         (poly-, reaction products, with alkoxylated amines and amides,
        sizing compns. containing, for glass fibers, for high-temperature polymer
        reinforcement)
     Epoxy resins, uses and miscellaneous
ΙT
     Urethane polymers, uses and miscellaneous
         (polyester-, sizing compns. containing, for glass fibers, for
        high-temperature polymer reinforcement)
     Epoxy resins, uses and miscellaneous
IT
     Polyureas
         (polyurethane-, sizing compns. containing, for glass fibers, for
        high-temperature polymer reinforcement)
     79-10-7D, 2-Propenoic acid, esters, polymers
TT
         (reinforcement of, sizes for glass fibers for)
     9002-98-6, Polyethylenimine
                                    9016-75-5, Polyphenylene
IT
     sulfide
         (reinforceming of, sizes for glass fibers for)
```

```
L80 ANSWER 29 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1989:175201 HCAPLUS

DOCUMENT NUMBER: 110:175201

TITLE: Corrosion inhibitors for amine-crosslinked vinyl polymex coatings

INVENTOR(S): Lucas, Howard R.

PATENT ASSIGNEE(S): American Cyanamid Co., USA

SOURCE: U.S., 8 pp.
```

CODEN: USXXAM

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	A	19881018	US 1987-106749	1987 1008
EP 310808	A1	19890412	< EP 1988-114075	1988 0829
EP 310808	R1	19920805	<	
Eb 210000	חב בי	S ED GB	GR, IT, LI, NL, SE	
AT 79126	E E	19920815	AT 1988-114075	
A1 /9120	L	1,7,2,0,2,0		1988 0829
			<	
ES 2043748	Т3	19940101	ES 1988-114075	
				1988
				0829
			<	
JP 01123876	A2	19890516	JP 1988-250004	1000
				1988
				1005
		10041006	< CA 1988-579454	
CA 1333326	A1	19941206	CA 1986-5/9454	1988
				1006
			<	
NO 8804479 °	Α	19890410	·	
NO 8804473	••			1988
				1007
			<	
NO 173943	В	19931115		
NO 173943	C	19940223		
ORITY APPLN. INFO.:			US 1987-106749 A	
				1987
				1008
			<	
			EP 1988-114075 A	1988
				0829
			<	0027
				(- 1

Combinations of triazoles, dipyridyls, and 2-hydroxypyridine (I) AB are useful as corrosion inhibitors for coatings of amine-crosslinkable vinyl polymers prepared from CH2:CRCONHCH(OR1)CO2R2 (R = H or Me; R1 = H, C1-6 alkyl, or C2-6 2-hydroxyalkyl; R2 = C1-6 alkyl, C5-6 cycloalkyl, or C2-6 2-hydroxyalkyl). A composition containing 132.8:66.4:99.6:33.2 (weight ratio) Bu acrylate-Me acrylamidoglycolate Me ether-Me methacrylate-styrene copolymer 9.3, NH2(CH2)6NHOCCH2CH[NH(CH2)6NH2]CONH(CH2)6NH2 crosslinker 2.0, benzotriazole (II) 0.18, and I 0.1 g was coated on a

Bondrite 100 panel, air-dried 20-30 min, and baked 20 min at 100° to give a coating that exhibited 0.06% corrosion after 792 h in a salt-spray test (ASTM B 117), compared with 3% after 288 h for a similar coating not containing I and II.

IT 120171-33-7P 120171-34-8P 120171-35-9P 120171-36-0P 120192-42-9P 120293-98-3P

(manufacture of, as anticorrosive coatings)

RN 120171-33-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with N,N'-bis(6-aminohexyl)-2-[(6-aminohexyl)amino]butanediamide, butyl 2-propenoate, ethenylbenzene and methyl methoxy[(1-oxo-2-propenyl)amino]acetate (9CI) (CA INDEX NAME)

CM 1

CRN 95758-48-8 CMF C22 H48 N6 O2

CM 2

CRN 77402-03-0 CMF C7 H11 N O4

$$\begin{array}{c|cccc} \text{O} & \text{OMe} & \text{O} \\ & & & & \\ \parallel & & & \parallel \\ \text{MeO}-\text{C}-\text{CH}-\text{NH}-\text{C}-\text{CH} & \text{CH}_2 \end{array}$$

CM 3

CRN 141-32-2 CMF C7 H12 O2

CM 4

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

CRN 80-62-6 CMF C5 H8 O2

RN 120171-34-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with N,N'-bis(6-aminohexyl)-2-[(6-aminohexyl)amino]butanediamide, butyl 2-propenoate, ethenylbenzene, methyl methoxy[(1-oxo-2-propenyl)amino]acetate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 95758-48-8 CMF C22 H48 N6 O2

CM 2

CRN 77402-03-0 CMF C7 H11 N O4

CM 3

CRN 141-32-2 CMF C7 H12 O2

CM 4

CRN 100-42-5

CMF C8 H8

 $H_2C = CH - Ph$

CM 5

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{c|c} ^{H_2C} & \text{O} \\ \parallel & \parallel \\ \text{Me-} & \text{C-} & \text{C-} & \text{OMe} \end{array}$$

CM 6

CRN 79-10-7 CMF C3 H4 O2

RN 120171-35-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with N,N'-bis(6-aminohexyl)-2-[(6-aminohexyl)amino]butanediamide, butyl 2-propenoate, N-[3-(dimethylamino)propyl]-2-methyl-2-propenamide, ethenylbenzene and methyl methoxy[(1-oxo-2-propenyl)amino]acetate (9CI) (CA INDEX NAME)

CM 1

CRN 95758-48-8 CMF C22 H48 N6 O2

CM 2

CRN 77402-03-0 CMF C7 H11 N O4

$$\begin{array}{c|cccc} & \text{O Me} & \text{O} \\ & || & || & || \\ \text{MeO- C- CH- NH- C- CH} \end{array}$$

CRN 5205-93-6 CMF C9 H18 N2 O

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ & || & || \\ \text{Me}_2 \text{N--} (\text{CH}_2)_3 - \text{NH--} \text{C--} \text{C--} \text{Me} \end{array}$$

CM 4

CRN 141-32-2 CMF C7 H12 O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{n-BuO-C-CH-----} \text{CH}_2 \end{array}$$

CM 5

CRN 100-42-5 CMF C8 H8

H2C CH-Ph

CM 6

CRN 80-62-6 CMF C5 H8 O2

RN 120171-36-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[(1,1-dimethylethyl)amino]ethyl ester, polymer with N,N'-bis(6-aminohexyl)-2-[(6-aminohexyl)amino]butanediamide, butyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, methyl methoxy[(1-oxo-2-propenyl)amino]acetate and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CRN 95758-48-8 CMF C22 H48 N6 O2

$$\begin{array}{c|c} & \text{O} & \text{NH- (CH}_2)_6 - \text{NH}_2 \\ & || & | \\ & \text{H}_2\text{N- (CH}_2)_6 - \text{NH- C- CH- CH}_2 - \text{C- NH- (CH}_2)_6 - \text{NH}_2 \\ & || & || \\ & \text{O} \end{array}$$

CM 2

CRN 77402-03-0 CMF C7 H11 N O4

CM 3

CRN 3775-90-4 CMF C10 H19 N O2

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ & || & || \\ \text{t-BuNH-CH}_2\text{--CH}_2\text{--O-C-C-Me} \end{array}$$

CM 4

CRN 868-77-9 CMF C6 H10 O3

CM 5

CRN 141-32-2 CMF C7 H12 O2

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{ccc} ^{H_2C} & \text{O} \\ & || & || \\ \text{Me--} & \text{C--} & \text{C--} & \text{OMe} \end{array}$$

RN 120192-42-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with N,N'-bis(6-aminohexyl)-2-[(6-aminohexyl)amino]butanediamide, butyl 2-propenoate, ethenylbenzene, 2-ethenyl-1H-imidazole and methyl methoxy[(1-oxo-2-propenyl)amino]acetate (9CI) (CA INDEX NAME)

CM 1

CRN 95758-48-8 CMF C22 H48 N6 O2

CM 2

CRN 77402-03-0 CMF C7 H11 N O4

$$\begin{array}{c|cccc} & \text{O OMe} & \text{O} \\ & || & || & || \\ \text{MeO-C-CH-NH-C-CH} \end{array}$$

CM 3

CRN 43129-93-7 CMF C5 H6 N2

$$\begin{array}{c}
\text{H} \\
\text{N} \\
\text{CH} = \text{CH}_2
\end{array}$$

CM 4

CRN 141-32-2 CMF C7 H12 O2

CM 5

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

CM 6

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{ccc} ^{\text{H}_2\text{C}} & \text{O} \\ & \parallel & \parallel \\ ^{\text{Me-C-C-C-OMe}} \end{array}$$

RN 120293-98-3 HCAPLUS

L-Alanine, N-(2-propenyloxy)-, methyl ester, polymer with

N,N'-bis(6-aminohexyl)-2-[(6-aminohexyl)amino]butanediamide, butyl
2-propenoate, 2-[(1,1-dimethylethyl)amino]ethyl
2-methyl-2-propenoate, ethenylbenzene and methyl
2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 95758-48-8 CMF C22 H48 N6 O2

$$\begin{array}{c|c} & \text{O} & \text{NH-(CH}_2)_6 - \text{NH}_2 \\ & || & | \\ & \text{H}_2\text{N-(CH}_2)_6 - \text{NH-C-CH-CH}_2 - \text{C-NH-(CH}_2)_6 - \text{NH}_2 \\ & || & | \\ & || & | \\ & || & | \\ & || & | \\ & || & | \\ & || & | \\ & || & | \\ & || & | \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || & || \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &| \\ & || &$$

CM 2

CRN 18942-72-8 CMF C7 H11 N O3

Absolute stereochemistry. Rotation (-).

CRN 3775-90-4 CMF C10 H19 N O2

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ & || & || \\ \text{t-BuNH-CH}_2\text{--CH}_2\text{--O-C-C-Me} \end{array}$$

CM 4

CRN 141-32-2 CMF C7 H12 O2

CM 5

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

CM 6

CRN 80-62-6 CMF C5 H8 O2

IC ICM C08K005-46 ICS C08K005-34; B32B015-08; C23F009-00

```
INCL 428461000
     42-5 (Coatings, Inks, and Related Products)
CC
     anticorrosive amine crosslinked vinyl coating; corrosion
     inhibitor vinyl coating; benzotriazole corrosion
     inhibitor vinyl coating; pyridyl corrosion inhibitor
     vinyl coating; hydroxypyridine corrosion inhibitor vinyl
     coating; acrylamidoglycolate copolymer
     coating corrosion inhibitor; styrene acrylic
     coating corrosion inhibitor; acrylate copolymer
     coating corrosion inhibitor; methacrylate copolymer
     coating corrosion inhibitor; triazole corrosion inhibitor
     vinyl coating
     Crosslinking agents
IT
        (amines, for anticorrosive vinyl polymer coatings)
     Amines, uses and miscellaneous
IT
        (crosslinking agents, for anticorrosive vinyl coatings
     Coating materials
IT
        (anticorrosive, vinyl polymer, amine-crosslinked, containing
        triazoles or bipyridyl and hydroxypyridine)
                                      95-14-7, Benzotriazole
     61-82-5, 3-Amino-1,2,4-triazole
IT
     142-08-5, 2-Hydroxypyridine 366-18-7, 2,2'-Bipyridine
        (corrosion inhibitors, for amine-crosslinked vinyl polymer
        coatings)
     105-83-9, N,N-Bis(3-aminopropyl)methylamine
                                                    107-15-3,
IT
     1,2-Ethanediamine, uses and miscellaneous
                                                  109-76-2,
                                                           111-40-0
     1,3-Propanediamine
                          110-60-1, 1,4-Butylenediamine
                                                            143-23-7,
     124-09-4, 1,6-Hexanediamine, uses and miscellaneous
     Bis(hexamethylenetriamine)
                                  646-19-5, 1,7-Heptanediamine
     694-83-7, 1,2-Diaminocyclohexane
                                                     2997-01-5,
                                       1761-71-3
                                   3377-24-0, 2,2-Bis(4-
     4,7-Dioxadecane-1,10-diamine
                               4426-48-6, 1,2-Butylenediamine
     aminocyclohexyl)propane
     26603-36-1, Benzenedimethanamine
        (crosslinking agents, for anticorrosive vinyl polymer
        coatings)
     120171-33-7P 120171-34-8P 120171-35-9P
IT
     120171-36-0P 120192-42-9P 120293-98-3P
         (manufacture of, as anticorrosive coatings)
     95758-48-8P
ΙT
         (manufacture of, as crosslinkers for anticorrosive vinyl polymer
        coatings)
                                                   120171-32-6P
                    120171-30-4P
                                    120171-31-5P
     120171-29-1P
IT
         (manufacture of, for amine-crosslinked anticorrosive
        coatings)
L80 ANSWER 30 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                          1989:12657 HCAPLUS
                          110:12657
DOCUMENT NUMBER:
                          Sealing composition for porous
TITLE:
                          inorganic sheets
                          Fukushima, Yoshibumi; Maruyama, Hitoshi;
INVENTOR (S):
                          Yamauchi, Junnosuke
                          Kuraray Co., Ltd., Japan
PATENT ASSIGNEE(S):
                          Jpn. Kokai Tokkyo Koho, 12 pp.
SOURCE:
                          CODEN: JKXXAF
                          Patent
DOCUMENT TYPE:
                          Japanese
LANGUAGE:
FAMILY ACC. NUM. COUNT:
                          1
PATENT INFORMATION:
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ACQUAH 09/613,425
                                                              DATE
                                        APPLICATION NO.
                  KIND
                             DATE
    PATENT NO.
                              _____
    -----
    -----
                              19880610 JP 1986-287414
    JP 63139083
                       A2
                                                               1986
                                                               1201
                                            <--
                       B4 19950301
    JP 07017464
                                         JP 1986-287414
PRIORITY APPLN. INFO.:
                                                               1986
                                                               1201
    The sealing composition comprises modified poly(vinyl alc.)
AB
    (A) having silyl group 0.01-5 mol*, acrylic emulsion (B) (glass
    transition temperature 5-50°), and hydration-preventing agent (C)
    with A:B weight ratio of (5-50):(50-95) and A:C
    weight ratio of (10-99.5): (0.5-90). Thus, a Ca
    silicate sheet was coated with a sealing compn
    . comprising aqueous 15% saponified vinyltrimethoxysilane-vinyl
```

warm and hot water. 9002-98-6 IT

(hydration-preventing agent, in sealing composition for porous calcium silicate sheet)

sheet had water permeability 0.2 L/m2 in an 8-h test, 90° peel strength 1.0 kg/cm, and high resistance to weathering and to

acetate copolymer 80, acrylic emulsion (Primal C-72) 100, and colloidal SiO2 (Cataloid SI-500) 37 parts. The coated

9002-98-6 HCAPLUS RN

Aziridine, homopolymer (9CI) (CA INDEX NAME) CN

> 1 CM

CRN 151-56-4 CMF C2 H5 N



ICM C04B041-63 IC

58-4 (Cement, Concrete, and Related Building Materials) CC Section cross-reference(s): 38

vinyltrimethoxysilane vinyl acetate copolymer sealer; acrylic emulsion silicate sheet sealer; colloidal silica silicate sheet sealer; calcium silicate sheet polymer sealer

Epoxy resins, uses and miscellaneous ΙT

(hydration-preventing agent, in sealing composition for porous calcium silicate sheet)

Building materials IT

(sheet, porous, sealing composition containing vinyltrimethoxysilane-vinyl acetate copolymer and acrylic emulsion for)

Sealing compositions IT

(vinyltrimethoxysilane-vinyl acetate copolymer and acrylic emulsion, for porous calcium silicate

7631-86-9, Silica, uses and miscellaneous 9002-98-6 IT 72993-87-4, Sumirez 633 118058-33-6, Sumirez EX 70M

(hydration-preventing agent, in sealing composition for porous calcium silicate sheet)

1309-37-1, Iron oxide (Fe2O3), uses and miscellaneous IT 13463-67-7, Titanium dioxide, uses and miscellaneous (pigment, in sealing composition for porous calcium silicate sheet)

30850-72-7D, Vinyltrimethoxysilane-vinyl acetate IT 86368-72-1D, copolymer, saponified 51005-06-2, Rhoplex C 72 Vinyltriacetoxysilane-vinyl acetate copolymer, saponified

(sealing composition containing, for porous calcium silicate sheet)

1344-95-2, Calcium silicate IT (sheet, porous, sealing composition containing vinyltrimethoxysilane-vinyl acetate copolymer and acrylic emulsion for)

57-13-6, Urea, uses and miscellaneous IT (stabilizer, in sealing composition for porous calcium silicate sheet)

L80 ANSWER 31 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1987:106772 HCAPLUS

DOCUMENT NUMBER:

106:106772

TITLE:

Chemically treated glass fibers for

reinforcing polymeric materials

INVENTOR (S):

Sanzero, George Valentine; Hudson, Howard John; Melle, David Thomas; Das, Balbhadra

PATENT ASSIGNEE(S):

PPG Industries, Inc., USA Eur. Pat. Appl., 52 pp.

SOURCE: CODEN: EPXXDW

Patent

DOCUMENT TYPE:

English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	EP 206189	A1	19861230	EP 1986-108169	1986 0614
				<	
	EP 206189 R: BE, CH, DE,	B1 FR. GB			
	CA 1285833	A1	19910709	CA 1986-511667	1986 0616
				<	
	JP 62036048	A2	19870217	JP 1986-149333	1986 0625
				<	
	JP 05007337	B4	19930128		
	US 4789593	A	19881206	US 1987-39812	1987 0413
				<	
PRIO	RITY APPLN. INFO.:			US 1985-748388 A	1985 0625

US 1985-748389

Α

1985 0625

<--

Strands consist of glass fibers at least partially coated with AB dried residue of an aqueous composition comprising ≥1 water-soluble, dispersible, or emulsifiable filmforming bisphenol A polyester with polyester and epoxy functionality, an effective amount of an organo functional coupling agent selected from acryloxy-containing and methacryloxyl-containing coupling agents, an effective amount of a cationic fiber lubricant, .apprx.0.05 .simeq. 0.4 weight% cationic organic quaternary ammonium salt with alkoxy moieties having an acid number of .gtorsim.10%, and water .apprx.1 to .simeq.30 weight% of total solids. The composition is free of inorg. antistatic agents and has pH .ltorsim.7. Reinforced polymeric matrixes are produced using chopped glass fibers treated with the aqueous compn Thus, glass fibers of preferred composition (SiO2 55.8, CaO 21, Al203 14.8, B203 5.2, Na20 1.4, F 0.5, and MgO 0.3 weight%; n 1.57-1.557) were treated with a composition of γ methacryloxypropyltrimethoxy silane 380, acetic acid 25, water for silane 22,720, Emery 6717 cationic lubricant 151.5, water for lubricant 1895, aqueous emulsion of Neoxil 954 22,720, antistat Neoxil AO 5620 284 g, and water to 50 gal. Strands (H-55 or K-37) were dried at .apprx.220-300°F for 11 h, chopped to .apprx.2.54 cm, and added to an acrylic polyester matrix to give translucent panels. The strands had good wettability in the plastic and excellent wet-through in chopping and the panel had only slight strand matchsticking and excellent clarity and weatherability vs. poor wet-through, slight to moderate matchsticking, moderate clarity and good weatherability with previously claimed treatment compns. which did not contain the bisphenol A polyester and the organic quaternary ammonium antistat.

IT 9002-98-6, Emery 6717

(lubricant, glass fiber reinforcement pretreatment with compns. containing, for good processability)

RN 9002-98-6 HCAPLUS

CN Aziridine, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 151-56-4 CMF C2 H5 N



IC ICM C03C025-02 ICS C03C013-00; C08J005-08

CC 57-1 (Ceramics)

Section cross-reference(s): 38

IT 80-05-7D, epoxy copolymers 107119-96-0
(film-forming emulsion, in glass fiber reinforcement pretreatment compns., for good processability)
IT 9002-98-6, Emery 6717

9002-98-6, Emery 6717 (lubricant, glass fiber reinforcement pretreatment with compns.

containing, for good processability)

L80 ANSWER 32 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1985:488931 HCAPLUS

DOCUMENT NUMBER:

103:88931

TITLE:

Aromatic polyamide fibers for reinforcing

PATENT ASSIGNEE(S):

Bridgestone Tire Co., Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 6 pp. CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 60072930	A2	19850425	JP 1983-180390	1983 0930
PRIORITY APPLN. INFO.:			< JP 1983-180390	1983 0930

Aromatic polyamide fibers for tire cords are prepared by initially AB finishing the fibers with formaldehyde-resorcinol [24969-11-7] having excess resorcinol content, copolymer (I) heat-treating the fibers, then coating the fibers with 1-35:100 (weight ratio) mixture of I and a rubber latex, and finally heat-treating the fibers. Thus, 110 parts resorcinol was polycondensed with 50 parts 37% HCHO to give I. Poly(1,4-phenyleneterephthalamide) [24938-64-5] cords were coated with aqueous 38% (solids) I composition, dried, and heat-treated at 240°. The treated cords were immersed in a composition containing H2O 518.8, resorcinol 11.0, 37% HCHO 16.2, 28% NH4OH 10.0, and 41% butadiene-styrene -vinylpyridine copolymer [9019-71-0] latex 244.0 parts, dried, heat-treated at 220°, embedded in a rubber compn ., and vulcanized 30 min at 145° to give embedded cords with high adhesion to rubber.

97756-56-4 IT

(fiber, tire cords from, formaldehyde-resorcinol copolymers containing embedded rubber as finishes for)

97756-56-4 HCAPLUS RN

1,4-Benzenedicarboxylic acid, polymer with N-[3-(4-CN aminophenoxy) phenyl]-1,4-benzenediamine (9CI) (CA INDEX NAME)

CM 1

CRN 97756-55-3 CMF C18 H17 N3 O

100-21-0 CRN CMF C8 H6 O4

ICM C08J005-06

ICS B29B015-14

ICA D06M015-41; D06M015-693

ICI B29K021-00

IC

39-13 (Synthetic Elastomers and Natural Rubber) CC

polyamide arom tire cord; adhesion rubber polyamide fiber; ST polyphenyleneterephthalamide fiber tire cord; formaldehyde resorcinol copolymer finish polyamide; finishing polyamide tire cord; butadiene vinylpyridine styrene elastomer finish

Adhesion TΤ

(of polyamide fiber to rubber, improvement of, by formaldehyde-resorcinol copolymers containing synthetic

Polyamide fibers, uses and miscellaneous IT (aromatic, tire cords, formaldehyde-resorcinol copolymers containing synthetic rubber as finishes for)

IT Tires

(cords, aromatic polyamide, formaldehyde-resorcinol copolymers containing synthetic rubber as finishes for)

25035-37-4 97756-56-4 24938-64-5 IT

(fiber, tire cords from, formaldehyde-resorcinol copolymers containing embedded rubber as finishes for)

IT 24969-11-7

(finishes, containing butadiene-styrene -vinylpyridine elastomers, for aromatic polyamide fibers for tire cords)

9019-71-0 IΤ

TITLE:

(rubber, finishes, containing formaldehyde-resorcinol copolymers, for aromatic polyamide fibers for tire cords)

L80 ANSWER 33 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

1985:36784 HCAPLUS ACCESSION NUMBER: 102:36784

DOCUMENT NUMBER:

Photosensitive composition for

printing plates

Toyo Rubber Industry Co., Ltd., Japan PATENT ASSIGNEE(S):

SOURCE:

Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent Japanese

LANGUAGE:

. 1

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 59113430	A2	19840630	JP 1982-222716	1982 1218
JP 03063738 PRIORITY APPLN. INFO.:	B4	19911002	< JP 1982-222716	1982 1218

The claimed composition contains a photopolymn. initiator and AB a prepolymer (number average mol. weight 800-20,000) having ≥2 polymerizable ethylenic terminal groups, and which prepolymer is composed of components resp. obtained by (1) quaternization of the product formed from (a) organic polyisocyanate, (b) optional polyol, (c) chain-extension agent having ≥1 tertiary amino group(s) and ≥2 active H in the mol., and (d) ethylenic unsatd. compound having active H, and (2) (a) organic polyisocyanate, (b) poly(ethylene glycol) (number average mol. weight ≤5000) having ≥2 active H, and (c) ethylenic unsatd. compound having active H; these components (number average mol. weight 1300-2000 and 800-3000, resp.) are contained in (30-100):(0-72) weight% ratio. The composition may optionally contain an unsatd. compound having the general formula H2C:CRCO2(CH2CH2O)nCOCR:CH2(R = H, Me, Et; n = 2-10), amounting to 5-40% of the above prepolymer. The composition provides high photocurability and ease of development using water. It is suitable for preparation of flexog. printing plates that can print on coarse and uneven surfaces. Thus, an 80% prepolymer solution A was obtained by successive polymerization steps: poly(ethylene adipate) 300, isophorone diisocyanate 133.2, and 2hydroxyethyl acrylate 34.8 g were polymerized with dibutyltin acrylate as catalyst, which was followed by reaction of the product with N-methyldiethanolamine 11.9 and 1,4-butanediol 4.5, and by reaction with 2-hydroxymethyl acrylate 124.3, Me2SO4 12.6 g, and hydroquinone. Alternately, the prepolymer solution A was prepared by the following process. 2,4-Tolylene diisocyanate 624.2, 2-hydroxyethyl acrylate 416.4 g were polymerized to obtain an intermediate A'. Reaction of 2,4-tolylene diisocyanate 386.9 with poly(ethylene glycol) (mol. weight 1000) 1123.8 g gave an intermediate B'. The intermediates A' 544.7, B' 1394.4, N-methyldiethanolamine 234, and Me2SO4 208.8 g were further polymerized and the product was made to react with tetrahydrofurfuryl acrylate (I) 595.5 g and hydroquinone, to obtain the prepolymer solution A. Then 80% prepolymer solution B was prepared by reaction of the intermediate A' 261 with N-methyldiethanolamine 53.5 g, of which product was made to react with Me2SO4 60.7, I 93.9 q and hydroquinone. The photosensitive composition was prepared by mixing prepolymer solns. A 60, B 30, benzoin Me ether 1.5, I 5, and poly(ethylene glycol dimethacrylate) (mol.

weight 330) 10 g. The composition coated on a polyester film and covered by the same thin film was UV imagewise exposed and developed in 60° water to obtain a plate with 3 mm relief depth.

94130-26-4 94130-27-5 94130-28-6 IT

(prepolymers, for photocurable composition for printing plates preparation)

94130-26-4 HCAPLUS RN

Hexanedioic acid, polymer with 1,4-butanediol, 1,2-ethanediol, CN 2-hydroxyethyl 2-propenoate, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and 2,2'-(methylimino)bis[ethanol] (9CI) (CA INDEX NAME)

CM 1

CRN 4098-71-9 CMF C12 H18 N2 O2

CM 2

CRN 818-61-1 CMF C5 H8 O3

$$\begin{array}{c} {\rm O} \\ || \\ {\rm HO-CH_2-CH_2-O-C-CH-} \end{array}$$

CM 3

CRN 124-04-9 CMF C6 H10 O4

 $HO_2C-(CH_2)_4-CO_2H$

CM

CRN 110-63-4 CMF C4 H10 O2

 $_{\rm HO^-}$ (CH₂)₄-OH

CRN 107-21-1 CMF C2 H6 O2

 $_{\rm HO^-\,CH_2^-\,CH_2^-\,OH}$

CM 6

CRN 105-59-9 CMF C5 H13 N O2

 $\begin{array}{c} & \text{Me} \\ | \\ \text{HO-} \ \text{CH}_2 - \ \text{CH}_2 - \ \text{N-} \ \text{CH}_2 - \ \text{CH}_2 - \ \text{OH} \end{array}$

RN 94130-27-5 HCAPLUS
CN 2-Propenoic acid, 2-hydroxyethyl ester, polymer with
2,4-diisocyanato-1-methylbenzene, 2,2'-(methylimino)bis[ethanol]
and tetrahydrofuran (9CI) (CA INDEX NAME)

CM 1

CRN 818-61-1 CMF C5 H8 O3

CM 2

CRN 584-84-9 CMF C9 H6 N2 O2

CM 3

CRN 109-99-9 CMF C4 H8 O ()

CM 4

CRN 105-59-9 CMF C5 H13 N O2

$$\begin{array}{c} & \text{Me} \\ | \\ \text{HO-} \ \text{CH}_2 - \ \text{CH}_2 - \ \text{CH}_2 - \ \text{CH}_2 - \ \text{OH} \end{array}$$

RN 94130-28-6 HCAPLUS
CN 2-Propenoic acid, 2-hydroxyethyl ester, polymer with
2,4-diisocyanato-1-methylbenzene, 1,2-ethanediol,
2,2'-(methylimino)bis[ethanol] and tetrahydrofuran (9CI) (CA
INDEX NAME)

CM 1

CRN 818-61-1 CMF C5 H8 O3

$$_{
m HO-CH_2-CH_2-O-C-CH=CH_2}^{
m O}$$

CM 2

CRN 584-84-9 CMF C9 H6 N2 O2

CM 3

CRN 109-99-9 CMF C4 H8 O



CRN 107-21-1 CMF C2 H6 O2

 $_{\rm HO^-\,CH_2^-\,CH_2^-\,OH}$

CM 5

CRN 105-59-9 CMF C5 H13 N O2

Мe $_{\rm HO-\,CH_2-\,CH_2-\,N-\,CH_2-\,CH_2-\,OH}$

G03C001-68; C08F002-48; C08F299-06; C08G018-67; C08G018-83; IC G03F007-10

74-6 (Radiation Chemistry, Photochemistry, and Photographic and CC Other Reprographic Processes)

Photoimaging compositions and processes IT

(photocurable polymeric, for printing plate preparation)

25852-47-5 2399-48-6 IT

(photocurable polymeric composition containing prepolymer and, for printing plate preparation)

94130-26-4 94130-27-5 94130-28-6 IT

(prepolymers, for photocurable composition for printing plates preparation)

L80 ANSWER 34 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1984:573155 HCAPLUS

DOCUMENT NUMBER:

101:173155

TITLE:

Water-base paint compositions

PATENT ASSIGNEE(S):

Nippon Paint Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 14 pp.

SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE:

Patent Japanese

LANGUAGE:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
 JP 59064675	A2	19840412	JP 1982-174892	1982 1004
US 4504609	A	19850312	< US 1983-538653	1983 1003
CA 1208835	A1	19860729	< CA 1983-438225	

USHA SHRESTHA EIC 1700 REM 4B28

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1983
                                                                    1003
                                                <--
                                            GB 1983-26545
                                19840620
                         Α1
    GB 2131437
                                                                    1983
                                                                    1004
                                                <---
                                19861112
    GB 2131437
                          B2
                                            JP 1982-174891
PRIORITY APPLN. INFO.:
                                                                    1982
                                                                    1004
                                                <--
                                             JP 1982-174892
                                                                    1982
                                                                    1004
    The compns. contain (1) a water-soluble acrylic-modified alkyd or
AΒ
    polyester resin, (2) a water-insol. resin with fine grains (average
     size 0.01-6~\mu) prepared by polymerization of ethylenically unsatd.
     compds. (1-2 solids weight ratio 99:1 to 15:85),
     and optionally (3) crosslinking agents, pigments, and/or other
     additives. The compns. have good workability and storage
     stability and can be formulated to give flat or glossy surfaces.
     Thus, water-soluble resin (prepared by modifying an alkyd resin prepared
     from glycerol, pentaerythritol, phthalic anhydride, dehydrated
     castor oil, and soybean oil with acrylic acid,
     Bu acrylate, 2-hydroxyethyl methacrylate, Me
     methacrylate, and styrene and neutralizing with
     dimethylethanolamine) 42, resin granules (average size 0.7 \mu) of
     2-ethylhexyl acrylate-2-hydroxyethyl
     acrylate-Me methacrylate copolymer
     [53197-06-1] 85, and pigment paste [prepared from the above
     water-soluble resin and Tipaque R-820 (TiO2 pigment)] 140 parts were
     mixed and sprayed on steel plate. The thickness limit for
     obtaining a nondripping surface was \geq 50~\mu~vs. \leq 30
     \mu when the resin granules were not used.
     79-10-7D, acrylic-modified alkyd derivs. 80-62-6D
IT
     , acrylic-modified alkyd derivs. 100-42-5D,
     acrylic-modified alkyd derivs. 141-32-2D,
     acrylic-modified alkyd derivs.
        (coatings, water-thinned, containing powdered vinyl
        polymers, with improved workability and storability)
     79-10-7 HCAPLUS
RN
     2-Propenoic acid (9CI) (CA INDEX NAME)
CN
HO- C- CH- CH2
     80-62-6 HCAPLUS
RN
     2-Propenoic acid, 2-methyl-, methyl ester (9CI) (CA INDEX NAME)
```

RN 100-42-5 HCAPLUS

CN Benzene, ethenyl- (9CI) (CA INDEX NAME)

 $H_2C = CH - Ph$

RN 141-32-2 HCAPLUS

CN 2-Propenoic acid, butyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c}
O \\
\parallel \\
n-BuO-C-CH \longrightarrow CH_2
\end{array}$$

IT 92183-65-8

(water-thinned polyester coatings containing powdered, with improved workability and storability)

RN 92183-65-8 HCAPLUS

Nonanedioic acid, polymer with 2-[bis(2-hydroxyethyl)amino]ethanesulfonic acid, butyl 2-propenoate, 2,2-dimethyl-1,3-propanediol, 1,2-ethanediyl bis(2-methyl-2-propenoate), ethenylbenzene, 2-hydroxyethyl 2-propenoate, 1,3-isobenzofurandione, methyl 2-methyl-2-propenoate and oxiranylmethyl tert-decanoate (9CI) (CA INDEX NAME)

CM 1

CRN 71206-09-2 CMF C13 H24 O3 CCI IDS

CM 2

CRN 10191-18-1 CMF C6 H15 N O5 S

$$\begin{array}{c} {\rm CH_2-CH_2-OH} \\ | \\ {\rm HO-CH_2-CH_2-N-CH_2-CH_2-SO_3H} \end{array}$$

CM 3

CRN 818-61-1 CMF C5 H8 O3

$$\begin{array}{c} {\rm O} \\ || \\ {\rm HO-CH_2-CH_2-O-C-CH} \end{array} \\ {\rm CH_2} \\$$

CRN 141-32-2 CMF C7 H12 O2

CM 5

CRN 126-30-7 CMF C5 H12 O2

$$\begin{array}{c} \text{Me} \\ \mid \\ \text{HO-CH}_2\text{-C-CH}_2\text{-OH} \\ \mid \\ \text{Me} \end{array}$$

CM 6

CRN 123-99-9 CMF C9 H16 O4

$$_{\rm HO_2C^-}$$
 (CH₂)₇-CO₂H

CM 7

CRN 100-42-5 CMF C8 H8

 $_{\text{H}_2\text{C}}=\text{CH}-\text{Ph}$

CM 8

CRN 97-90-5 CMF C10 H14 O4

CRN 85-44-9 CMF C8 H4 O3

CM 10

CRN 80-62-6 CMF C5 H8 O2

$$^{\text{H}_2\text{C}}_{||}$$
 0 || || Me- C- C- OMe

IC C09D005-02; C08F299-04; C09D003-68

CC 42-8 (Coatings, Inks, and Related Products)

ST waterborne acrylic modified alkyd coating

IT Soybean oil

(acrylic-modified alkyd derivs., water-thinned coatings, containing powdered vinyl polymers, with improved workability and storability)

IT Castor oil

IT

IT

(dehydrated, acrylic-modified alkyd derivs., water-thinned coatings, containing powdered vinyl polymers, with improved workability)

IT Coating materials

(water-thinned, acrylic-modified polyesters, containing powdered vinyl polymers, with improved workability and storability)

56-81-5D, acrylic-modified alkyd derivs. 79-10-7D,

acrylic-modified alkyd derivs. 80-62-6D,

acrylic-modified alkyd derivs. 85-44-9D, acrylic-modified alkyd

derivs. 100-42-5D, acrylic-modified alkyd derivs.

115-77-5D, acrylic-modified alkyd derivs. 141-32-2D,

acrylic-modified alkyd derivs. 868-77-9D, acrylic-modified alkyd

derivs. 92213-81-5

(coatings, water-thinned, containing powdered vinyl polymers, with improved workability and storability)

9003-53-6 9003-69-4 53197-06-1 66028-38-4 85874-99-3

92004-93-8 92183-65-8 92183-66-9 92488-65-8

(water-thinned polyester coatings containing powdered, with improved workability and storability)

L80 ANSWER 35 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

1983:596604 HCAPLUS ACCESSION NUMBER:

99:196604 DOCUMENT NUMBER:

Flocked fabrics TITLE:

Kanebo NSC K. K., Japan PATENT ASSIGNEE(S):

Jpn. Kokai Tokkyo Koho, 6 pp. SOURCE:

CODEN: JKXXAF

Patent DOCUMENT TYPE: Japanese LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
 JP 58076581	A2	19830509	JP 1981-174823	1981 1031
PRIORITY APPLN. INFO.:			< JP 1981-174823	1981 1031

Flocked fabrics with improved bulk and resilience are prepared by

AΒ coating the fabric with adhesive dispersions containing thermoplastic polymer-covered expandable beads, flocking the fabric, and then expanding the beads. Thus, H2O 100, 30% colloidal silica 15, aqueous 10% adipic acid-diethanolamine copolymer [40989-36-4] 2.5, 2.5% K2Cr2O7 1, vinylidene chloride 100, and neopentane [463-82-1] 20 parts and Bz202 were mixed to give expandable beads (A). Cotton muslin was coated (250 g/m2) with a composition containing 40%

3.6:10:82.4:4 (weight ratio) acrylic

acid-acrylonitrile-Bu acrylate

-N-methylolacrylamide copolymer emulsion 100, NH4OH 1, and A beads 5 parts, flocked with rayon fibers, dried, and heat-treated 3 min at 150° to give a flocked fabric with good resilience and high bulk.

40989-36-4 87781-23-5 ΙT

(expandable beads from thermoplastic polymers and, adhesives containing, for flocking of fabrics)

40989-36-4 HCAPLUS RN

Hexanedioic acid, polymer with 2,2'-iminobis[ethanol] (9CI) (CA CNINDEX NAME)

CM 1

CRN 124-04-9 CMF C6 H10 O4

 HO_2C^- (CH₂)₄ - CO₂H

CM 2

CRN 111-42-2 CMF C4 H11 N O2 $HO-CH_2-CH_2-NH-CH_2-CH_2-OH$

87781-23-5 HCAPLUS RN

Poly[oxy-1,2-ethanediylimino-1,2-ethanediyloxy(1,6-dioxo-1,6-CN hexanediyl)] (9CI) (CA INDEX NAME)

D06N007-00

ICA B32B005-24

40-9 (Textiles) CC

40989-36-4 87781-23-5 IT

(expandable beads from thermoplastic polymers and, adhesives containing, for flocking of fabrics)

L80 ANSWER 36 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1979:584955 HCAPLUS 91:184955

DOCUMENT NUMBER: TITLE:

Photosensitive resin compositions

INVENTOR (S):

Minamidaira, Masaru; Fujimoto, Toshiaki; Koda,

Hajime; Kasei, Yoshihiro; Eto, Kuniomi

PATENT ASSIGNEE(S):

SOURCE:

Toyobo Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

LANGUAGE:

Patent Japanese

1

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 54051819	A2	19790424	JP 1977-118084	1977 0930
			<	
JP 60021374 PRIORITY APPLN. INFO.:	B4	19850527	JP 1977-118084 A	1977 0930
			<	

GΙ

$$\mathbb{R}^{1}\mathbb{N}$$

$$(R^4)_m$$
 COCH (OR^6) (R⁵) n

Photosensitive resin compns. for relief printing plates contain a AB thionine compound (I; R, R1, R2, R3 = C1-6 alkyl) 0.005-0.5 and a benzoin alkyl ether derivative [II; R4, R5 = C1-6 alkyl, halo; R6 = C1-6 alkyl, substituted alkyl (substituents are selected from C1-4 alkoxy, acetyl, C1-6 alkoxyalkoxy); n, m = 0-5] 0.03-3.0 weight %. The photosensitive resin compns. exhibit an excellent sensitivity balance. Thus, ε-caprolactam-N,N'-di(3aminopropyl)piperazine adipate copolymer (60:40 weight ratio) 60, acrylamide 30, methylenebis(acrylamide) 5, hydroquinone Me ether 0.2, benzoin Me ether 1, and tetramethylthionine chloride 0.02 part were dissolved in MeOH and coated on a polyester support (125 $\mu)\,,$ and another polyester film (250 μ) was adhered. The film support (125 μ film) was removed, then the film was imagewise exposed through an original having $60-\mu$ wide lines and $200-\mu$ diameter dot images, and developed with MeOH to give a relief printing plate having excellent relief images. 79-41-4, uses and miscellaneous 27030-83-7 IT

1T 79-41-4, uses and miscellaneous 27030-83-7
69860-63-5D, reaction products with glycidyl
acrylate

(photosensitive resin compns. containing, for relief printing plates)

RN 79-41-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl- (9CI) (CA INDEX NAME)

RN 27030-83-7 HCAPLUS

CN Hexanedioic acid, polymer with hexahydro-2H-azepin-2-one and 1,4-piperazinedipropanamine (9CI) (CA INDEX NAME)

CM 1

CRN 7209-38-3 CMF C10 H24 N4

CRN 124-04-9 CMF C6 H10 O4

 $_{\rm HO_2C^-}$ (CH₂)₄-CO₂H

CM 3

CRN 105-60-2 CMF C6 H11 N O



RN 69860-63-5 HCAPLUS CN Decanedioic acid, polymer with 1,4-piperazinedipropanamine (9CI) (CA INDEX NAME)

CM 1

CRN 7209-38-3 CMF C10 H24 N4

CM 2

CRN 111-20-6 CMF C10 H18 O4

 $HO_2C-(CH_2)_8-CO_2H$

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IC G03C001-68; C08F002-50; G03F007-02
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CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic Processes)

IT 56-81-5D, reaction products with glycidyl methacrylate 79-06-1, uses and miscellaneous 79-39-0 79-41-4, uses and miscellaneous 97-90-5 106-90-1D, reaction products with bis(aminopropyl)piperazine-sebacic acid copolymer 106-91-2D, reaction products with glycerin 110-26-9 119-61-9, uses and miscellaneous 150-76-5 27030-83-7 69860-63-5D

, reaction products with glycidyl acrylate 71431-20-4 (photosensitive resin compns. containing, for relief printing plates)

IT 61-73-4 531-55-5 71431-91-9 71802-09-0 (sensitizer composition containing benzoin alkyl ether and, for photosensitive resins for relief printing plates)

IT 3524-62-7 6652-28-4 60503-96-0 71431-92-0 (sensitizer composition containing thionine derivative and, for photosensitive resin compns. for relief printing plates)

L80 ANSWER 37 OF 37 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1977:92195 HCAPLUS

DOCUMENT NUMBER:

86:92195

TITLE:

Hydrophilic-hydrophobic amphoteric polysalt

sizing compositions and
paper sized therewith

INVENTOR(S):

Strazdins, Edward

PATENT ASSIGNEE(S):

American Cyanamid Co., USA

SOURCE:

U.S., 7 pp. CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4002588	Α	19770111	US 1974-468113	1974 0508
PRIORITY APPLN. INFO.:			< US 1974-468113 A	1974 0508

Adding aqueous dispersions of anionic acrylamide-acrylic acid-styrene copolymer (I)
[27083-59-6] and cationic poly(amine-amides) to cellulose pulp increased its freeness and drainage, and gave paper with improved strength properties. Thus, adding 0.4% aqueous dispersion of I and adipic acid-epichlorohydrin-triethylenetetramine copolymer [26568-79-6] mixture in 4:1 weight ratio to a papermaking suspension and diluting to a 0.7% consistency gave

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Ç.
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paper with 35.5% increase in Mullen burst strength. Above treatment also increased pulp freeness by 3-4%.

IT 25212-19-5 26568-79-6 61981-24-6

(acrylamide copolymer containing, paper strengthening with)

RN 25212-19-5 HCAPLUS

CN Hexanedioic acid, polymer with N-(2-aminoethyl)-1,2-ethanediamine and (chloromethyl)oxirane (9CI) (CA INDEX NAME)

CM 1

CRN 124-04-9 CMF C6 H10 O4

 $_{\rm HO_2C^-}$ (CH₂)₄-CO₂H

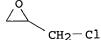
CM 2

CRN 111-40-0 CMF C4 H13 N3

 $_{\rm H_2N-CH_2-CH_2-NH-CH_2-CH_2-NH_2}$

CM 3

CRN 106-89-8 CMF C3 H5 Cl O



RN 26568-79-6 HCAPLUS

CN Hexanedioic acid, polymer with N,N'-bis(2-aminoethyl)-1,2-ethanediamine and (chloromethyl)oxirane (9CI) (CA INDEX NAME)

CM 1

CRN 124-04-9 CMF C6 H10 O4

 $HO_2C-(CH_2)_4-CO_2H$

CM 2

CRN 112-24-3 CMF C6 H18 N4 ${\rm H_2N-CH_2-CH_2-NH-CH_2-CH_2-NH-CH_2-CH_2-NH_2}$

CM 3

CRN 106-89-8 CMF C3 H5 Cl O

RN 61981-24-6 HCAPLUS
CN 1,3-Benzenedicarboxylic acid, polymer with N-(2-aminoethyl)-1,2-ethanediamine and (chloromethyl)oxirane (9CI) (CA INDEX NAME)

CM 1

CRN 121-91-5 CMF C8 H6 O4

CM 2

CRN 111-40-0 CMF C4 H13 N3

H2N-CH2-CH2-NH-CH2-CH2-NH2

CM 3

CRN 106-89-8 CMF C3 H5 Cl O

IC C08L039-04

INCL 260029600NR

CC 43-7 (Cellulose, Lignin, Paper, and Other Wood Products)
Section cross-reference(s): 36

ST acrylamide copolymer paper strengthening

IT Pulp, cellulose

(drainage and freeness improvement of, with acrylamide

copolymer containing cationic polyamides)

IT Paper

(strengthening of, with acrylamide copolymer containing polyamides)

IT 25212-19-5 26568-79-6 61981-24-6

62003-81-0

(acrylamide copolymer containing, paper strengthening with)

IT 9005-25-8, uses and miscellaneous

(cationic, acrylamide copolymer containing, paper strengthening with)